Transcript of the public meeting held by the Department of the Environment to discuss N.B. Power's report on a transmission line from Salisbury to Belledune.

Compte-rendu de l'assemblée publique tenue par le Ministère de l'Environnement pour discuter du rapport d'Energie N.B. sur une ligne de transport de l'électricité de Salisbury à Belledune.

Published by the New Brunswick Department of the Environment
Publié par le Ministère de l'environnement du Nouveau-Brunswick

March 1991
Mars 1991

POINTE-VERTE MARCH 18, 1991/LE 18 MARS 1991

PIERRE POULIN

Mesdames et messieurs, bonsoir. Au nom du Ministre de l'Environnement, je voudrais vous souhaiter la bienvenue. Good evening, ladies and gentlemen. On behalf of the Minister of the Environment, I'd like to welcome you. Mon nom est Pierre Poulin et je présiderai la rencontre de ce soir. Je demeure dans ce beau village de Pointe-Verte. On vous accueille chez-nous. Je ne suis pas un employé du Ministère de l'Environnement ni d'Energie Nouveau-Brunswick. Mon rôle est strictement pour m'assurer que la rencontre de ce soir se déroule de façon ordonnée et de permettre à tous les intervenants qui le souhaitent de présenter un exposé ou de poser des questions.

Comme vous le savez, le Ministre de l'Environnement a organisé cette rencontre publique pour discuter du rapport préparé par Energie Nouveau-Brunswick relativement à son projet de construire une ligne de transport de l'électricité entre Salisbury dans le sud de la province et Belledune. J'aimerais tout d'abord présenter les personnes qui m'accompagnent ce soir. Or, à ma droite, les représentants du Ministère de l'Environnement. D'abord, Monsieur Kirk Gordon qui est responsable de la section des études d'impact sur l'environnement au Ministère. Et Monsieur Richard Lecours, qui est un agent de planification de l'environnement au Ministère. Il est aussi président du Comité interministériel de révision qui regroupe les experts techniques ayant analysé l'étude d'impact sur l'environnement, et préparé la déclaration générale de révision.

A ma gauche, ce sont les représentants--c'est un peu comme dans un match de boxe, à ma droite, à ma gauche--à ma gauche, les représentants d'Energie Nouveau-Brunswick, le promoteur du projet. Alors, il y a Monsieur Charles Hickman, qui est responsable des études environnementales, et Monsieur Darrell Clark qui est le directeur de projet pour la ligne de transport. C'est lui qui monte dans les poteaux. Nous avons également quelques représentants des divers organismes qui ont examiné l'étude d'impact sur l'environnement,

des représentants de la firme de consultants. Alors c'est eux qui ont préparé l'étude et préparé la déclaration générale de révision. Ils sont ici pour répondre aux questions dans leur domaine de compétence.

I'd like to begin by introducing the individuals who are seated with me this evening. On my right are representatives of the Department of the Environment. Kirk Gordon is Manager of the Environmental Impact Assessment Section of the Department; Richard Lecours, Planner in the E.I.A. Section; he is the Chairman of the Interdepartmental Review Committee, which is the group of technical experts who have reviewed the study and prepared a General Review Statement.

On my left are representatives of N.B. Power, who is the proponent in this case. Mr. Charles Hickman is Manager of Environmental Assessments, and Mr. Darrell Clark is the Project Manager for the transmission line. Also in attendance are some representatives from the various agencies who reviewed the E.I.A. study and produced a General Review Statement. They are here to answer any questions you may have which relate to their area of responsibility.

Avant de poursuivre, j'aimerais inviter tous ceux et celles qui désirent présenter un exposé officiel et qui n'ont pas déjà signé la feuille qui est à l'entrée juste près de la porte, et de le faire maintenant. Nous pourrons ainsi nous assurer que tous ceux et celles qui désirent intervenir auront l'occasion de le faire. Nous vous encourageons aussi à poser des questions, et à formuler des commentaires et pour ce faire, vous n'avez pas besoin de signer la formule en question. J'aimerais mentionner aussi que les services de traduction simultanée sont assurés. Et si vous voulez en bénéficier, vous devez demander un récepteur.

Bon. Nous vous présenterons d'abord trois courts exposés. D'abord, Monsieur Gordon du Ministère de l'Environnement vous fera une courte description du processus provincial des E.I.E.; ensuite Monsieur Hickman d'Energie Nouveau-Brunswick vous expliquera le projet et vous fournira des renseignements détaillés sur le rapport de l'E.I.E.;

enfin, Monsieur Lecours du Ministère de l'Environnement, parlera du rôle du comité interministériel de révision dans ce processus et résumera brièvement la déclaration générale de révision préparée par son comité.

We would like to begin this evening with a couple of short--a couple means three--a couple of short presentations. Mr. Gordon of the Department of the Environment will provide us with a brief description of the province's E.I.A. process; next, Mr. Hickman of N.B. Power will tell us about the project they are proposing and details of the E.I.A. report; finally, Mr. Lecours of the Department of the Environment will speak about the role of the Interdepartmental Review Committee in this process, as well as briefly summarize the General Review Statement prepared by his committee.

So , I introduce first Mr. Gordon.

KIRK GORDON

Thank you, Mr. Chairman. Good evening, ladies and gentlemen. I would like to spend the next few minutes providing you with information on New Brunswick's Environmental Impact Assessment or E.I.A. process, and it's application to N.B. Power's proposal to construct a 345 kilovolt transmission line from Salisbury to Belledune.

As in most other Canadian jurisdictions, E.I.A. in New Brunswick is a legislated process. However, several factors make this different from the regulatory reviews carried out under other regulations administered by the Department. These include legislated public participation during E.I.A.'s, a broadened definition of environment to include the social environment, involvement of many other government agencies including those from the federal government, a wider application to previously unexamined development activities, and its function as a coordinated environmental planning tool, are some of the major benefits of Environmental Impact Assessment.

The E.I.A. process for this project began early in 1989 when N.B. Power registered its intention to construct this line. The registration submitted included a detailed description of the project proposal, along with maps showing the location of the various transmission line corridors. This information was circulated to a variety of government departments with responsibilities ranging from fish and wildlife concerns to human health interests to local government administration authority. These departments eventually provided representatives to the Technical Review Committee, chaired by Mr. Lecours, which was appointed for this study period. The results of this initial review suggested that although the construction and operation of the transmission line would be subject to many regulations such as the Watercourse Alteration Regulation, the Pesticides Control Act, the Crown Lands Act and the Fisheries Act, the size of the project and the potential to cause impacts pointed to the need for a formal assessment.

As a result, the Minister of the Environment instructed N.B. Power to conduct an assessment, subject to study guidelines that would be issued soon after. The study guidelines were circulated for public and interdepartmental review, identified the areas to be addressed in the study. These areas will be discussed by others in the presentations to follow.

The next step was for N.B. Power to prepare terms of reference for this study. While guidelines identify what is to be studied, terms of reference describe how a particular subject will be addressed. One example could be concerns about how transmission line construction would affect fish habitat. This would require a range of study efforts beginning with obtaining available information from sources such as Fisheries Officers, Fisheries Biologists, published reports, government files and field investigations. This information would be used to inventory fish habitat along the proposed alignment and to focus on those areas which were perceived to be most at risk. N.B. Power would then be required to identify ways to eliminate potential effects in these areas. In the example I'm using here, impact mitigation might be achieved by specifying measures to control siltation into

sensitive streams or rivers, or by allowing construction to occur only when sensitive fish species are not in their most critical life cycle phases.

Once the Review Committee and N.B. Power had agreed to the study procedures, a consultant was hired by N.B. Power and the study began. A draft version of the E.I.A. study was submitted by N.B. Power in the Fall of 1990. The Technical Review Committee examined this report and outlined the areas where they felt there were shortcomings in the study. This is a common practice, the Environmental Assessment, and usually results in considerable discussion between the proponent and the Technical Review Committee. This discussion resulted in an agreement on approaches aimed at addressing inadequacies in the document. Following a period used by N.B. Power to do additional work on their study, a final report was submitted to the Minister for their consideration by the Review Committee, the study was accepted by the Minister. This acceptance does not mean that changes cannot be made to certain aspects of the project. Rather it means that the report is complete enough to release it to the public for their examination.

When the Minister announced this public meeting process, he also released all of the E.I.A. information for public review. Other documents provided at the same time included a summary of the E.I.A. report, prepared by the Department of the Environment, and a General Review Statement prepared by the Technical Review Committee. These documents are available here tonight.

This brings us to the point of tonight's meeting, which is the first in a series to be held in communities along the proposed route. As a participant you can become involved in a number of ways. You may wish to simply listen to the discussion that unfolds tonight and later write a letter to the Minister stating your views. The deadline for receiving written comments is April 11. You might also want to verbally comment on the E.I.A. report or ask a question about some aspect of the study. We are here to answer any questions you may have on the process itself or on the contents of the General Review Statement. We can

assure you that the Minister will be made aware of tonight's proceedings and of your concerns about or your interest in support of the project.

The E.I.A. process on N.B. Power's proposal to construct this transmission line will conclude following the public phase. All of the input from public meetings will be considered by the Minister before he makes a recommendation to Cabinet as to whether or not the project should proceed, and if it should proceed, under what conditions. The final approval decision will be made by the Provincial Cabinet. You should note that the completion of E.I.A.'s on other projects in New Brunswick have resulted in modifications to both design and implementation. New Brunswick Power, the proponent of the project we're discussing here tonight, is certainly aware of this, having been required to install a scrubber at the Belledune power plant following completion of their recent E.I.A. You can therefore be assured that your input is an important part of the E.I.A. process. Thank you.

PIERRE POULIN

Thank you, Mr. Gordon. Now Mr. Hickman.

CHARLES HICKMAN

Good evening. I'd like to just take a few minutes to introduce you to the project. If you're not familiar with it or just re-introduce you to the project for everybody who has already participated in some of the different houses we've held. I'll just spend a few minutes discussing the rationale or the need for this project, basically how the planners came up with the fact that we needed a new transmission line running from Salisbury to Belledune. And I'll spend a few minutes discussing outline the actual strategy that we followed and the plan that was implemented to select a route coming up from Salisbury to Belledune, and I'll just discuss some of the issues that were examined for that route by our consultant in their Environmental Impact Assessment report.

As indicated at the back door, many copies, I guess, of the Environmental Impact Assessment report, and they said it contained more information than I could find here

tonight. Hopefully, after this presentation, you can ask any questions and we'll simply try to answer any issues or address any issues that you may have.

So first of all, I'll just discuss briefly the project need or the project rationale. New Brunswick Power, like all major utilities, tries to maintain a transmission system so that basically if any major line into an area fails, that we have enough additional capacity on the other lines, that we can still provide power and electricity to your homes. The planners work with the load 4 casters and they basically predicted that by shortly after the Winter of 1992, there's a risk that if we lose a major transmission line into either the Northeast of the province or into the Southeast of the province, i.e. into the Bathurst area or into the Salisbury area, there's a risk that we will not have enough capacity on the existing system to be able to guarantee a safe supply of electricity. So that's one reason why we need a new line: to be able to guarantee a supply of electricity, especially during the high-demand periods.

The second reason we need to have a transmission line comes from the fact that the Belledune plant, which has got approval for two units--at the moment we have a transmission line that runs from Eel River to Bathurst, and for the first unit we can make use of that line in terms of exit transmission. It's getting the electricity from the Belledune plant on to the New Brunswick grid. However, with the second unit, we basically have to have a second line running from Bathurst to Belledune. Otherwise, you just cannot get the electricity from the second unit into the grid.

So basically, there are two prime reasons: one is load 4 casters require that we guarantee a supply, we have to supply electricity in after 1992. We cannot guarantee that, the way it's predicted at the moment. And secondly, we need it for exit transmission from Belledune.

In terms of the actual project, I'll just spend a few minutes explaining the individual parts of the project. I'll start from the southern end of the line and work north. We need

to build a new line from Salisbury to Newcastle. We need to build a new line from Newcastle to Bathurst. Both those lines may be built and be operational basically by the November 1992. That's just to ensure the adequate supply of electricity to those areas. We can energize an existing line from Bathurst to Belledune, and is a line that is there at the moment, and is called a 30-08 line and it's a 345 KV line and it's only used at 230 KV or kilovolts. Now, we can just re-energize that essentially at the higher voltage and that will give us the exit transmission from Belledune. So basically, by 1992 we need to build a new line from Salisbury to Bathurst, and we can use the existing line between Belledune and Bathurst to exit transmission. After the second unit at Belledune is built, we need to build a new line from Bathurst to Belledune, but that's not needed until after 1997.

Now having identified the need and individual lines we needed, we basically registered the project, got the guidelines from the provincial government, and then had to select, or develop a strategy for selecting a specific route, basically going from Belledune to Salisbury. Initially we identified a 15-kilometre wide corridor that runs from Belledune all the way south--and it's indicated on some of the maps in the back--that shows the overall corridor all the way to Salisbury. Within that corridor, our consultant basically reviewed all the available information on pretty well every subject that you can think of: from fisheries to bird life to endangered species, archeological reserves, these agricultural resources. They also looked at the socio-economic basis of the whole corridor, identifying urban areas, identifying agricultural areas, those important socio-economic aspects of the corridor. Using that information, a series of alternate routes were developed and information sessions were held in seven locations all the way along the line. So a lot of those information sessions were held in February last year. And also based on the alternate routes that are being developed through a series of meetings held with municipal governments all the way down the line and with local service districts. Those meetings, both the public meetings and the municipal meetings, were held in order to receive input from the general public concerning the line, concerning any specific concerns that people in that area might have about the potential routes that are being identified. An analysis was carried out which, out of those various routes identified, the preferred route which, again, is identified on the maps

at the back, and along that route the consultant then did a more detailed analysis of the impacts that would be associated with. Essentially, they identified for the area what they considered to be the valued ecosystem components. Now in New Brunswick, for example, it's basically salmon--it is considered to be a valued ecosystem component, it's an important sport fishery and supports a lot of people in a lot of different parts of the province, including this line. So for instance, the salmon fishery or the salmon is considered to be a valued ecosystem component. Other examples would include things like agricultural areas, blueberry fields, basically areas where there's an importance either locally or biologically so that we could try and avoid it if possible, avoid those areas, avoid those constraints.

They carried out the assessment by looking at those valued ecosystem components along the complete route, and basically compared or evaluated the interaction that would occur between the line during construction, operation and maintenance, and those components, those valued ecosystem components. All the information that they gathered concerning those ecosystem components is contained in the Environmental Impact Assessment report. Having carried out their assessment after each individual component they developed a numerical evaluation as to what the impact would be, and at the end of that, they carried out if you like, an overall statement as to whether or not the project could proceed in their opinion without raising any major concerns with regard to those components. That document was prepared and the assessment was carried out and was submitted as Kirk just explained, to the province for comment. Now, one of the things that came out of the comments was the interest to develop a protection plan, especially with regard to watercourses--again it goes back to the fishery being an important resource in the province. And so, subsequent to the development of the Environmental Impact Assessment report, we have prepared an Environmental Protection Plan, and it's currently in a draft stage, and is free for comment, and that has been developed specifically to address the construction and the operational practices that N.B. Power has for its transmission facilities. That plan is designed to ensure that we can carry out all the necessary activities

on those facilities without harming the environment. And that has become, if you like, an integral part about this line and our other transmission activities.

So in some way, I guess I would like to say that a need was identified, we had a consultant carry out a route selection strategy or study. Once the preferred route had been selected, they carried out a detailed assessment along that route, prepared a report, and now we are hoping for the province to decide one way or the other, as to whether we can proceed along this route or whether we need to make any changes. I hope we can answer any questions you may have. Thank you.

PIERRE POULIN

Merci, Monsieur Hickman. Maintenant, je vous présente Richard Lecours du Ministère de l'Environnement.

RICHARD LECOURS

Merci. Je vais essayer de résumer ce que le Comité de révision interdépartemental a conclu sur l'étude qui a été faite par Energie Nouveau-Brunswick. En particulier, puisque je vais essayer d'être bref, le document de déclaration de révision générale est disponible en arrière, si quelqu'un voudrait spécifiquement savoir qu'est-ce qu'on a conclu du point de vue verbatim.

La déclaration résume essentiellement les résultats de l'examen de cette étude qu'Energie Nouveau-Brunswick a complétée par le comité de révision. Et le comité se compose de représentants des ministères et organismes suivant les gouvernements provincial et aussi fédéral. Et en particulier, évidemment, c'est le Ministère de l'Environnement du Nouveau-Brunswick qui est impliqué, le Ministère des Ressources naturelles et Energie, le Ministère des Affaires municipales, le Ministère de la Santé et des Services communautaires du Nouveau-Brunswick, le Ministère de l'Agriculture, le Ministère de Tourisme, de Loisir et de Patrimoine, le Ministère de Transport du Nouveau-Brunswick; Environnement Canada et Pêches et Océans Canada aussi sont impliqués dans le Comité

de révision--et ont mis disponibles des experts conseils, des experts techniques qui ont regardé le document.

La révision avait pour but vraiment de déterminer si l'étude d'impact qu'Energie Nouveau-Brunswick a complétée répondait à nos lignes directrices, que le Ministère de l'Environnement a émis à Energie Nouveau-Brunswick. Monsieur Gordon a bien expliqué comment le public était impliqué dans le développement de ces lignes directrices qui, essentiellement, posent des questions de où on a identifié, où il y a le potentiel d'avoir des impacts, soit biophysiques ou à l'environnement, ou socio-économiques au public, aux gens et à leur état financier. Ces lignes directrices ont été émises en février 1990 à la suite d'un examen où le public a pu s'impliquer dans leur développement. Finalement, en consultation avec le Comité de révision, le Ministre de l'Environnement a déterminé que cette étude répondait aux lignes directrices qu'on a développées, et ça veut dire qu'on pouvait prendre la prochaine étape qui est de venir consulter le public pour voir comment vous vous sentez envers ce document.

Le Comité de révision a toutefois identifié un certain nombre de préoccupations au sujet du rapport et c'est vraiment de ça que je vais parler maintenant. Ces préoccupations touchaient en particulier aux mesures environnementales et de protection de la ligne qui serait construite. Les points que le comité a soulevés--le comité a quand même déterminé que les points qu'on va soulever peuvent être réglés de façon satisfaisante à travers les règlements existants au Nouveau-Brunswick et au niveau fédéral. Alors là, je tiens à remarquer que même si je vais identifier qu'est-ce que le comité a identifié comme soit des difficultés ou des commentaires sur l'étude, on tient toujours à vos propres commentaires qui sont aussi importants dans notre processus.

Le premier domaine qu'on a regardé c'est la sélection de la route et les routes alternatives. Et avec un projet de cette sorte, c'est le point vraiment le plus important, finalement, à l'étude. L'approche fondamentale qui a été proposée par Energie Nouveau-Brunswick c'est essentiellement de réduire les effets en évitant les éléments

importants qui pourraient être affectés par le projet. Alors là, ils ont développé un modèle de sélection très détaillé, un modèle qui tient compte de ces éléments qui ont été identifiés dans leur étude, et on proposait à la fin de leur processus d'avoir mis sur pied ce modèle, une route qui risquait d'avoir le moins d'effets négatifs importants sur l'environnement. Le Comité de révision en regardant cette approche n'a aucun problème avec cette approche, sauf qu'on voulait remarquer au public que le choix de la route finale est influencé de façon importante par le classement relatif des points qu'ils auraient identifiés, des contraintes qu'ils auraient identifiées, qui pourraient être affectés par leur projet. Mais encore, ce modèle est acceptable au comité.

Deuxièmement, et le point encore très important, c'est sur le Plan de protection de l'environnement dont Monsieur Hickman a parlé--le Comité de révision a identifié à mesure d'avoir fait l'examen de cette étude qu'il tenait à avoir un document qui accompagnerait l'étude, qui décrirait en plus de détails, en plus de précisions, les méthodes de construction et le maintien sur la ligne de transport de l'électricité qu'ils allaient construire, pour nous permettre de mieux connaître ou de mieux évaluer l'efficacité des stratégies de réduction des effets environnementaux possibles. Alors essentiellement, si on sait comment de façon détaillée la ligne de transmission est construite et va être maintenue, à ce moment-là le Comité de révision peut dire "oui, ils ont éliminé les impacts de façon appropriée".

Alors là, on a demandé à Energie Nouveau-Brunswick d'élaborer ce programme de protection de l'environnement qui a été soumis et qui a été distribué avec l'étude au public. Et on tient beaucoup à des commentaires du public sur ce sujet. En particulier, le programme de protection de l'environnement touche et regarde sur les passages des cours d'eau, sur les passages historiques, sur les chemins d'accès, sur les zones tampons sur chaque côté des cours d'eau pour la protection des cours d'eau, les terres agricoles, les plans d'urgence dans le cas de situations imprévues ou des accidents, et aussi de la surveillance pendant la construction et le maintien de ce projet.

L'autre point qui a été touché c'est l'échéancier des activités, où on cherchait plus de détails sur l'aspect de quand est-ce que certaines étapes de construction et de maintien seraient faites dans la province le long du projet. Et pourquoi que c'est important? Ca peut affecter, par exemple, quand ils vont faire le défrichage du droit de passage, ça pourrait affecter les zones d'hivernement des chevreuils ou les zones de mises des orignaux. Aussi, dépendamment de quand ils vont passer les cours d'eau, pourrait affecter l'habitat des poissons, ainsi que les ressources archéologiques et historiques. Alors par exemple, s'ils traversent les cours d'eau pendant le gel, pendant maintenant par exemple, il y aurait très peu d'impact sur l'habitat des poissons; pendant l'automne ce serait différent. Et cet aspect-là a été incorporé dans le Plan, le programme de protection de l'environnement qui a été soumis par Energie Nouveau-Brunswick.

Un autre point qu'on a touché c'est les effets communautaires, en particulier la valeur des propriétés foncières, où Energie Nouveau-Brunswick a quand même regardé la question des effets sur la valeur des terrains qui seraient négociés où la ligne de transport passerait. Mais, on suggère quand même qu'Energie Nouveau-Brunswick aurait pu s'appuyer peut-être plus aux effets, aux propriétés qui sont environnantes, mais qui ne sont pas directement affectées par la ligne de transport. On a aussi commenté sur le point qu'Energie Nouveau-Brunswick pourrait envisager peut-être une zone tampon qui pourrait éliminer des impacts visuels pour les voisins à cette ligne de transport. Pour les terres privées, on a demandé qu'Energie Nouveau-Brunswick étudie peut-être la possibilité de limiter ou d'interdire l'accès au terrain le long des lignes de transport si les propriétaires ou les autorités gouvernementales désirent dans certains cas, parce que l'un des effets d'une ligne de transport c'est un accès plus important à des zones qui étaient auparavant inaccessibles.

Un autre aspect qu'on a regardé c'est de demander si Energie Nouveau-Brunswick pourrait considérer ou examiner des mesures qui pourraient réduire des impacts qui pourraient survenir lors du défrichage du passage pour le corridor pour la ligne de transport. Il pourrait avoir des effets parce que le bois est transporté par les propriétaires

dans certains cas, eux-mêmes plutôt qu'Energie Nouveau-Brunswick, et lorsqu'ils traversent des cours d'eau, ils peuvent peut-être pas respecter les règlements qui existent. Lorsqu'Energie Nouveau-Brunswick fait ce travail il n'y a aucun problème, mais lorsque les propriétaires sont dans cette situation, ils sont pas toujours connaissants des lois existantes qui peuvent contrôler cet aspect.

Pour les ressources archéologiques, en particulier le Ministère de Tourisme, de Loisir et de Patrimoine demandait qu'Energie Nouveau-Brunswick regarde certaines zones, en particulier les rivières Barnaby et Nepisiguit pour voir s'il y avait un potentiel archéologique à ces endroits-là. Et ce travail se fait présentement par Energie Nouveau-Brunswick. La seule recommandation qu'on a de ce point de vue là, c'est que ce travail soit complété avant la construction de ce projet. Pour l'exploitation forestière, le rapport décrit très bien les effets du défrichage, mais ce qu'on trouve qu'ils auraient pu ajouter, c'est l'aspect renouvelable de l'impact à la forêt, parce qu'on a quand même, après 50 ans ou 100 ans, il y a une ressource qui pourrait se renouveler.

Un autre point qui est assez important peut-être dans la perception du public c'est les effets sur la santé. Et dans le rapport de l'étude d'impact sur l'environnement touche à cet aspect aussi. Le Comité de révision est d'accord avec la conclusion du rapport qui ne prédit aucun risque important pour la santé à la suite de ce projet. Toutefois, le comité tient à faire remarquer au public qu'il existe une certaine controverse ou un désaccord dans ce domaine sur les risques et les effets pour la santé humaine causés par les champs électromagnétiques et des lignes de transport électriques. Alors à ce moment-là, on regarderait peut-être qu'il aient considéré la possibilité soit de mieux documenter le nombre de gens qui se trouvent le long de la ligne de transport, ou de développer des possibilités de réduction des champs en modifiant la conception de la ligne de transport de l'électricité. Par contre, le comité est toujours d'accord avec la conclusion qu'il n'y a aucun risque direct de ce projet.

Alors finalement, en regardant tous ces points, le comité conclut que ce projet peut être construit et entretenu de façon environnementalement acceptable, et avec ça on a quand même la condition que l'ébauche du programme de protection de l'environnement qui a été proposée, qui est en arrière aussi disponible pour vous, devrait être examiné par le public et approuvé par les organismes gouvernementaux avant que la construction puisse commencer, pour s'assurer de la mise en oeuvre de stratégies efficaces pour réduire les effets sur l'environnement de ce projet. Et c'est tout.

PIERRE POULIN

Merci, Monsieur Lecours. C'est à votre tour maintenant, c'est aux gens de la région de faire entendre leurs points de vue. Est-ce qu'on peut savoir d'abord s'il y en a qui ont signé la formule en arrière? Anybody? No? On me fait signe que non. Or, ça tombe bien parce qu'il n'est pas nécessaire de signer la formule pour pouvoir parler. En fait, vous n'avez qu'à vous présenter au micro et pour aider les interprètes on vous demande de parler lentement. Les discussions sont enregistrées afin que nous puissions préparer un compte-rendu, un résumé de la consultation publique pour la présenter au ministre. Et au début de votre intervention, on vous demande de vous identifier en vous approchant du micro.

These proceedings are being tape-recorded so that we may prepare transcripts and a summary of public consultation for presentation to the Minister. I'd ask you that you identify yourselves as you approach the microphone. So... C'est à vous autres à parler maintenant... Bon... Il me semblait qu'il y avait quelqu'un.

CHANTAL LALIBERTE

On va se risquer. Bon. Mon nom est Chantal Laliberté. Je suis directrice de la Commission d'urbanistes du district de Belledune. J'ai une préoccupation qui déborde un peu de mes préoccupations professionnelles, mais je pense que j'aimerais ça vous en faire part. Monsieur Lecours si je ne me trompe pas, mentionnait comme quoi qu'il y avait des études de santé qui avaient été prouvées comme étant pas dommageables pour vraiment la

population en les média. Mais j'ai quand même une préoccupation à ce niveau-là et j'aimerais peut-être qu'une zone tampon quand même assez considérable soit vraiment pensée pour ça pour pas avoir des développements résidentiels à proximité vraiment d'une ligne comme ça.

Bon, j'ai personnellement vécu pendant 22 ans en avant d'une ligne à haute tension au Québec, et je veux dire que, je ne pense pas que ça m'a vraiment nuit. Mais comme on dit, il y a beaucoup de controverse, beaucoup d'études faites autant au Québec ou dans d'autres provinces, mêmes aux Etats-Unis là-dessus, et je pense que tant que le cas sera pas réglé clairement, on serait mieux de prévenir, puis prévoir une zone tampon considérable. Et peut-être éviter des aménagements qui sont très populaires depuis quelques années là, de faire justement dans l'emprise de lignes électriques, de faire ça, vraiment aménager ça pour des fins récréatives. C'est peut-être un "pensez-y bien" là, à attendre là-dessus. Alors c'était juste un commentaire.

PIERRE POULIN

Merci madame. Est-ce qu'il y en a qui voudraient commenter là-dessus? Est-ce qu'on a effectivement laissé des zones tampons suffisantes?

CHARLES HICKMAN

I guess I can answer that to some extent. First of all, just in terms of controversy concerning electromagnetic fields, we recognize there is a controversy out there, a lot of people do have concerns and we respect those concerns very much. In term of N.B. Power's position or, I guess, the way we're looking at it at the moment, because of the lack of scientific information as to what a safe buffer zone is, as to what a safe distance would be, we don't have any guidelines provincially or federally, as to what we can consider to be a safe buffer zone. However, within both route selection and also within the design, there are two mitigating factors which can only reduce the risk to anybody that might be along the line if there is a risk at all. Firstly, the route selection is designed and carried out such that we try and avoid any urban areas, and basically we try to stay away from houses. For the

very simple reason that it's beneficial to us to be able to do that; it's easier in many ways to find a route that is away from urban areas, there are just less constraints. So that in itself means that we essentially would use the exposure of the general public.

The second aspect of the line design is that the right of way itself for this line is 50 metres wide. Now the scientific work that has been carried out, and we have people who have done individual measurements along transmission lines such as this, show that the edge of the right of way, the electromagnetic fields, in particular the magnetic fields are at a level which are not inconsistent with what you might find, for instance, in an office environment. And it's our understanding that the researching of the like is beginning to look towards what are the effects of just the ambience, if you like, of the magnetic fields that we are exposed to on a daily basis. Now certainly, if anywhere along the line--if any of the research is being carried out at the moment indicates that there is a real risk, and that somebody can give us some firm suggestions as to how we can mitigate those, we would certainly take that into account. Unfortunately at the moment, the science is not strong enough on either side to really give us a guidance as to what we should be doing. I don't know if that really answers your question.

PIERRE POULIN

Alors vous êtes satisfaite de la réponse? Okay, est-ce qu'il y a d'autres interventions? Alors je vois tous ces mâles dans la salle, moi je serais gêné de pas me lever après! Est-ce qu'on pourrait peut-être prendre une pause-café ou santé--je ne suis pas sûr que c'est santé; j'ai vu ce qu'il y avait sur la table et si je mange tout ça je ne dormirai pas cette nuit. Mais peut-être que ça vous amenera à discuter avec des gens pour pouvoir revenir après si vous avez d'autres questions. On pourra clore la réunion après ça. Alors, une pause de 15 minutes.

BREAK/PAUSE

PIERRE POULIN

Alors vous avez mangé tous les beignes, tous les "donuts", en bonne santé pour la nuit. Vous avez affilé vos crayons. Alors est-ce qu'il y aurait d'autres questions, d'autres commentaires sur le sujet? Profitez-en: comme on dit par chez-nous, "il faut prendre ça quand ça passe". On ne me dirait pas que ce soir il n'y a qu'une femme qui a réussi à parler ici. Avez-vous une deuxième question, Madame Laliberté? Okay, bien, s'il n'y a pas d'autre chose, je compte jusqu'à trois. C'est une fois, deux fois, et trois fois. Alors je remercie tout le monde --I thank everybody--pour avoir participé ce soir. Si jamais vous avez des remords de conscience, il y a une deuxième réunion demain soir à Bathurst, une troisième mercredi à Allardville.

If ever you dream about a question from here to tomorrow morning, don't come to my home! Tomorrow night there's a meeting in Bathurst and Wednesday in Allardville. So thank you very much everybody.

ANGELA BIRDSELL

Ladies and gentlemen, welcome. I think we are going to begin. Bienvenue mesdames et messieurs. Avant de commencer je vais dire qu'il y aura la traduction simultanée disponible, alors si vous avez besoin d'un transmetteur, vous pourrez en procurer un tout de suite à l'entrée. If you are in need of simultaneous translation services, you can receive a transmitter out by the entrance way.

Mesdames et messieurs, bonsoir. Au nom du Ministre de l'Environnement je voudrais vous souhaiter la bienvenue. Good evening, ladies and gentlemen. On behalf of the Minister of the Environment I'd like to welcome you all here.

Je suis Angela Birdsell et je présiderai la rencontre de ce soir. Je demeure à Fredericton. Je ne suis pas employée du Ministère de l'Environnement ou d'Energie N.B. Mon rôle ce soir est de m'assurer que la rencontre se déroule de façon ordonnée et de permettre à tous les intervenants qui le souhaitent de présenter un exposé ou de poser des questions.

Comme vous le savez, le Ministre de l'Environnement a organisé cette rencontre publique pour discuter du rapport de l'étude de l'impact sur l'environnement préparé par Energie N.B. relativement à son projet de construire une ligne de transport d'électricité de Salisbury à Belledune. J'aimerais tout d'abord présenter les personnes qui m'accompagnent ce soir. A ma droite, les représentants du Ministère de l'Environnement: Monsieur Richard Lecours, Agent de planification de l'environnement au ministère, et président du Comité interministériel de révision qui regroupe les experts techniques ayant analysé l'étude d'impact sur l'environnement et préparé la déclaration générale de révision. Et Monsieur Kirk Gordon, responsable de la section des Etudes d'impact sur l'environnement au ministère.

A ma gauche, les représentants d'Energie N.B., le promoteur du projet: Monsieur Charles Hickman, responsable des études environnementales, et Monsieur Darrell Clark est le directeur de projet pour la ligne de transport. Nous avons également quelques représentants des divers organismes qui ont examiné l'étude d'impact sur l'environnement et préparé la déclaration générale de révision. Ils sont ici pour répondre à vos questions dans leur domaine de compétence.

I'd like to begin by introducing the individuals who are seated with me this evening. On my right are representatives of the Department of the Environment. Mr. Kirk Gordon is Manager of the Environmental Impact Assessment section of the Department; that's on my far right. Next to me, Mr. Richard Lecours who is a Planner in the E.I.A. section and is Chairman of the Interdepartmental Review Committee, which is the group of technical experts who've reviewed the E.I.A. study and prepared the General Review Statement.

On my left are representatives of N.B. Power, who is the proponent in this case. Mr. Charles Hickman is the Manager of Environmental Assessments, and Mr. Darrell Clark is Project Manager for the transmission line. Also in attendance are some representatives from the various agencies who reviewed the E.I.A. study and produced the General Review Statement. They are here to answer any questions that you may have which relate to their area of responsibility.

Avant de poursuivre, j'aimerais inviter tous ceux et celles qui désirent présenter un exposé officiel et qui n'ont pas déjà signé la feuille à l'entrée de le faire maintenant. Nous pourrons ainsi nous assurer que tous ceux et celles qui désirent intervenir auront l'occasion de le faire. Nous vous encourageons aussi à poser des questions et à formuler des commentaires, mais ce n'est pas nécessaire de signer la feuille. J'aimerais mentionner aussi que les services de traduction simultanée sont assurés.

Nous vous présenterons d'abord quelques courts exposés. Monsieur Gordon du Ministère de l'Environnement vous fera une courte description du processus provincial des

E.I.E. Ensuite, Monsieur Hickman d'Energie N.B. vous expliquera le projet et vous fournira des renseignements détaillés sur le rapport de la E.I.E. Enfin, Monsieur Lecours du Ministère de l'Environnement parlera du rôle du Comité interministériel de révision dans ce processus, et résumera brièvement la déclaration générale de révision préparée par son comité.

We'd like to begin this evening with a couple of short presentations. Mr. Gordon of the Department of the Environment will provide us with a brief description of the province's E.I.A. process. Next, Mr. Hickman of N.B. Power will tell us about the project they're proposing and details of the E.I.A. report. And finally, Mr. Lecours of the Department of the Environment will speak about the role of the Interdepartmental Review Committee in this process, as well as briefly summarize the General Review Statements prepared by his committee. So with that, we are going to begin with Mr. Gordon.

AT THIS TIME PRESENTATIONS WERE MADE BY REPRESENTATIVES FROM THE DEPARTMENT OF THE ENVIRONMENT AND THE PROPONENT NB POWER (SEE PAGES 4 - 16).

ANGELA BIRDSELL

Merci, Monsieur Lecours. Up to this point we have nobody registered to present briefs. Before I open the floor to questions, I would like to stress that everyone is welcome to participate in the proceedings. It's not necessary to make a formal presentation. All you have to do is approach the microphone. So to begin, is there anyone who has a brief that they would like to present? If that's the case, then I would like to open the floor to any questions or general comments. All you have to do is approach the microphone. Let me stress again that this session is for the public to participate, so if you are unclear about any

of the presentations you heard here tonight, or want to know more about the project, this is the time to do it. Just approach the microphone and speak slowly and state your name. So are there any questions or comments? Go ahead.

GILLES COMEAU

Excusez. C'était surtout, moi, sur le point de vue...

ANGELA BIRDSELL

Excusez-moi. Je vais vous demander s'il vous plaît de dire votre nom au microphone.

GILLES COMEAU

Il n'y a pas de problème. Mon nom c'est Gilles Comeau. Comme c'est là, ma situation c'est que moi je reste sur les lignes, pas du bord qu'ils construisent, mais de l'autre côté. Puis j'essayais de savoir c'était quoi l'impact pour la santé des personnes--je sais que Monsieur Lecours, je pense, en a parlé un petit peu, puis il y a beaucoup de controverse comme il disait. Puis je lisais des articles comme par exemple, les russes dans les années '70 avaient dit que c'était pas bon pour la santé sur le point de vue de cancer leucémique et sur le point de vue que ça empêchait des fois les personnes de dormir, si vous voulez, à long terme. Puis je pense qu'il y a une madame dans le bout de la Californie dans les années, à peu près deux ou trois ans passés, qui disait que c'était dangereux que le cancer leucémique était peut être plus fréquent chez ces personnes qui restaient le long des lignes. Asteure, moi ma question c'était est-ce qu'il y a des possibilités pour accommoder les personnes qui sont présentement bâties de l'autre côté, s'elles veulent déménager, ou--tu sais, je ne sais pas si ça été vu dans l'étude ou?

CHARLES HICKMAN

Perhaps I can answer the question. First, there is no policy for arranging for people to move from along side the line. When we build the line, we will take an easement for the actual line itself, for the right-of-way which is 50 meters wide, and there will be no buildings permitted within that right-of-way, but we don't have a policy whereby we'll move people from outside of that area.

If I can just touch a little bit on the question of the health effect of the lines. It is correct that in the early sixties and seventies there were some studies that were done that seemed to indicate some concern with transmission lines. Since then, there have been many studies carried out and the concensus to date amongst the scientific community, is that they don't know if there is a risk and if there is, they don't know at what stage electric fields or magnetic fields become a risk - or indeed, what the magnitude of that risk is. The scientific community has been looking at it, continues to look at it, and there still is no concensus as to the effects of transmission lines and electromagnetic fields on human health.

We do, as a matter of course, try to avoid open areas, and houses, and any private properties, in our route selection. Unfortunately, it's not always possible to stay entirely away from everybody.

At the moment, we don't feel that there is enough information - scientific concensus - to be able to tell us how far away from a house we should be and, in particular, when you consider that the fields associated with a transmission line are not inconsistent with those that you might find in your own home, or in an office environment, when a situation where we don't think there's a health effect, our consultant concluded that there was a negligible health effect associated with a transmission line.

We recognize this controversy concerning the effects of lines. At the moment, there is not enough information to indicate what regulations should be in place. There's no regulations, no guidelines, as to how far we need to be from a house. So that's the situation at the moment.

JEAN SAVOIE

J'aimerais savoir si que c'est--comment je dirais ça, je comprends le point comme vous le dites qu'il n'y a rien qui est définitif, qu'il y a beaucoup de controverse, comme j'ai pu voir sur les articles aussi. C'est d'après vous, je comprends que vous n'êtes pas scientiste puis moi non plus là. Jusqu'à quel point qu'ils vont continuer à faire des études

là-dessus? Je sais que comme c'est là, je lisais récemment qu'il y avait une étude présentement qui était faite entre le Québec, l'Ontario et la France, je pense présentement. C'est quoi qu'ils espèrent? Ils espèrent-ils juste vraiment qu'ils peuvent conclure ça? Parce qu'on dirait--il y a aux Etats-Unis qu'ils font présentement une étude parce qu'ils veulent pas, je pense, que les lignes passent qui viennent de l'Hydro-Québec. Alors, je me demande si que les personnes qui font l'étude présentement au Canada, s'elles ne sont pas biaisées par le fait qu'elles travaillent pour l'Hydro? Tu sais, c'était ça un gros point que je me demande aussi.

CHARLES HICKMAN

Sir, it is correct that there are utilities both in the United States and in Canada that are investigating the issue in some detail. An intention is to conclusively show whether or not there is a health effect associated with transmission lines. The studies that are ongoing are not only being done by utilies. There are many other organizations that are both overseeing and doing their own studies independent of utilities.

The question of bias. We believe, and we ourselves are working very hard to try and find out whether or not there is a problem, not just with regards to transmission lines but because we realize that the fields that are associated with lines exist in the house, exist in the office environment as well. Everybody is trying very hard to find out exactly what the situation is, for everybody's good, for everybody's future health.

The results of study ... some studies are still ongoing, both here in Canada associated with France, and down in the States. Hopefully, those results ... those studies when they are completed, will provide definitive answers to if there's a risk and if there is, will give some indication as to how we can build our lines and plan our transmission facilities and indeed, build our homes, and build our appliances, so that there is no risk to ourselves.

JOE MCCULLEY

I wonder if I might respond a little more to that question? Thank you.

ANGELA BIRDSELL

Mr. McCulley, is it?

JOE MCCULLEY

Yes, Joe McCulley. I work for NB Power at the Health and Safety Division, and I'm the one that has been following this issue for NB Power.

Presently there are studies going on into the possible health effects of electromagnetic fields. Now to date, different scientific organizations have evaluated the research that has gone on in that area, groups like the National Academy of Sciences, the World Health Organization, the Office of Technological Assessment for the US Congress, California Department of Health Services, and so on, and so far to date none of them have been able to conclude that there have been any health ... dilatorius health effects due to electromagnetic fields but that doesn't prevent them from studying it further.

There are studies going on right now, the one that you mentioned with Hydro Quebec and Ontario Hydro and Electricité du France, will be complete in two to three years and it involves studying the workers and seeing what level of exposure, and if there's any effect that way. It's conceivable that they may never conclusively demonstrate that there's an effect or not a health effect because the effect that some researchers are talking about is very low.

Indeed, to put it into perspective, it's about a tenth of the risk of childhood accidents. It's along the same lines as second-hand cigarette smoke, that kind of thing, and not all researchers are talking about that level of risk. Just some of them are. So it's a very complicated picture right at the moment. Hopefully, they will resolve it one way or the other but it's conceivable that they never will because the risk is low. Does that answer your question?

If you would like, there's information on the table here that you ... and I could talk to you at the break more about that if you'd like.

Thank you.

ANGELA BIRDSELL

Thank you Mr. McCulley. You actually answered the question I was going to ask yourself or Members of the Panel as to whether or not there were copies of studies or institutions where we can actually write and get copies of these studies that might be of interest, but you say there's stuff at the back. Good.

Do we have another question. Please approach the microphone and state your name.

KEN GRAY

Yes. I'm Ken Gray. I have an outfitting business on the Nepisiguit River. What I'm concerned with is if it's the alternative route that you had already engineered that's going across the river at that particular point ... where you're going to cross the Nepisiguit. Or was it changed?

CHARLES HICKMAN

At the moment, the route that has been identified is a proposed route, as Mr. Lecours indicated. If there is a need to change the route, we will change it. The route that has been selected has taken into account concerns with regards to fisheries related issues, both outfitting, hunting, fishing in general. Perhaps if there is some specific concerns related to that crossing point, you might be able to indicate what they are and perhaps we can accommodate them in some way. At the moment, it is the proposed crossing location.

KEN GRAY

Why I'm so concerned there is because on the east side of the river we have a salmon pool and it is under lease, which if they clear-cut it right out to the river or if they take to

much there, we're going to get a big run-off in that river on that side. It's a salmon pool. We don't like to lose it.

CHARLES HICKMAN

Okay. In terms of the clear-cutting down to the river bank as we learned in protection plan, and this is a, basically a standard operating procedure for us now, we do not clear-cut down to the bank and depending on the steepness of the bank, we will maintain a vegetative buffer back to a certain distance depending on the slope of the bank.

Now in terms of the location of the salmon pool, the line at the moment is ... I don't know if up at that area the centre line has been cut, which is basically being cut to develop information for ourselves. Within reason, we have some flexibility as to exactly where we cross the river, and if it turns out that there is a salmon pool right where we are going at the moment, like I say, there is a good chance that we will be able to move it a little to avoid the pool. Obviously, it is not our intention to try and interfer in any way with the fishing activity up in the Nepisiguit and if it is possible to move the line a little bit one way or the other, I think we can accommodate that.

KEN GRAY

The engineers when they were up there - I was there with them - if they move it they can't move it down river, and if they move it they go up where my lodge is, so they want to take my lodge out.

CHARLES HICKMAN

I think perhaps what we need to do is try and get together with a map and see what the options are. If you have a ... you say the lodge is just upstream of the ...

KEN GRAY

It's just upstream from where the salmon pool is.

CHARLES HICKMAN

Okay. We have the property maps and the detailed maps at the back and perhaps we can see where a suitable position, a crossing place, from your point of view is and see if it does indeed, fall within our ability to move the line. We do have some flexibility.

How far down ... sorry ... how far down stream does the salmon pool go?

KEN GRAY

I would say it runs approximately close to one-quarter mile on the east side of the river and the proposed line is going right in the centre of it.

CHARLES HICKMAN

As I indicated, I think we will try and review that situation and see exactly where it does cross and see what place better that we have. I don't have the detailed engineering information to know what the other constraints are further down stream that the engineers mentioned, but we can certainly review that situation.

KEN GRAY

Thank you.

ANGELA BIRDSELL

Mr. Lecours would like to partly respond to your question as well.

RICHARD LECOURS

Yes. I'm not sure we are talking about an alternate route or the proposed route, but what I'd like you to do if you want is to talk to Mr. Hickman about your possible conflict there and identify exactly where the resource is and how it relates to the proposed route, and if they're not able to ... I would assume that they can solve the difficulty and if there was a problem that's still remaining, then you would just have to contact us either in

writing following this before April 11 and then we'll have your concern noted prior to making any decisions on the final route. So I hope that should resolve your concerns alright.

ANGELA BIRDSELL

Do you have another question or comment? I think what might be a good idea to do is to have a short break for coffee, and this could provide an opportunity for some of you to speak in person with either anybody up at this table or we also have representatives from the review committee who are here, and if you have questions or concerns, you might like to mingle with these people at that time. So we'll just have a short break, ten or fifteen minutes.

BREAK/PAUSE

ANGELA BIRDSELL

....(tape started here) ... and I think that as we were on this coffee break, we've heard a lot of interesting conversation about this topic and some points were brought up that were not brought up publicly during the meeting. I think that, if you like, you should come to the microphone and perhaps resume or do a resumEè of some of the concerns that you expressed to the members up here, because in this way they will be on the record. They will be recorded for the Minister. Of course, the other option is to write a letter before April 11, but I think that having had a chance to talk in person with the representatives, it might be helpful if you would like to come to the microphone and just either ask some of these questions again so they're on the record and have response which is on the record as well, or express some concerns again so that they are on the record.

Would anybody like to do that? Go ahead.

GILLES COMEAU

Gilles Comeau. I'll put it on record. Maybe I'm just going to put a resumé. Do they have to answer it back so you'll have it on your record or ...?

ANGELA BIRDSELL

That's up to you. If you'd like them to answer, they can answer.

GILLES COMEAU

Well, anyway, just to put it short is that last year I tried to sell my house. When I say tried, I called the real estate which my sister-in-law's working in, and she told me right away that the value of the house is lower because you are living along side those power lines.

Ca fait juste là, ça me donnait un point de vue que pour moi, c'est déjà une chose. L'autre chose comme je discutais, il y a un monsieur qui m'a dit qu'il allait venir mesurer pour voir c'était quoi le champ magnétique qui était dans la maison. C'est correct, ça va peut-être me satisfaire jusqu'à un certain point, mais même encore là, comme je dis, moi je suis dans le milieu. Tu as des scientistes qui disent, "oui c'est vrai, c'est pas dangereux", puis il y en a d'autres qui disent, "oui c'est vrai, c'est dangereux". Puis ça c'est dans la majorité des personnes qui restent dans les alentours d'ici, parce que j'ai entendu plusieurs personnes qui ont peur de ça. Puis j'ai même ma belle-mère qui me dit, qui dit toujours à ma femme, "tes enfants sont malades parce que tu restes à côté des lignes". Alors, moi j'essaie de leur dire, "bien non, pas nécessairement". Tu sais, c'est des choses comme ça. La perception, comme je dis, des gens des alentours d'ici c'est que "si tu restes là, tu as plus de danger". Puis comme je dis, avec des jeunes enfants, je ne veux pas me taper sur les doigts dans vingt ans et me dire "pourquoi?" C'est trop tard asteure, le mal est fait. En tout cas, c'était ça mes points.

L'autre chose c'était que si jamais que je déciderais de vendre ma propriété avec la valeur que je perds, j'aimerais savoir si que l'hydro serait prêt, ou N.B. Power serait prêt de compenser la différence, ou si je déménagerais? Merci.

CHARLES HICKMAN

If you like just for the record, I'll basically repeat what we were talking about earlier.

As you indicate, yes there is controversy about EMF and effect. Hopefully, some of the studies that are ongoing at the moment will provide a clear indication as to if or what the risk might be, which in turn will give us a better indication and hopefully, lay to rest some people's concerns.

Hopefully, that will also reduce the perception in terms of property value, that EMF might reduce property values. At the moment we recognize that there is a perception out there. We recognize that there is a concern. We hope as much as you do that we can get the concern answered one way or the other, and the sooner the better for everybody.

In terms of compensation, at the moment due to the lack of information, the lack of evidence of effects on property values, NB Power doesn't have a policy of compensating for apparently reduced property value when you try to sell the house.

We have been in touch with various boards and various people, and there again seems to be a mixed opinion as to whether or not people pay more or less or even wish to live close to a transmission line.

I think you indicated during our discussion earlier that, in fact, you'd actually been quite pleased to find a place where you could build a house close to a transmission line for your own reasons. And I guess that's an indication that's there two sides to it again.

ANGELA BIRDSELL

Est-ce que nous avons d'autres questions ou commentaires? Well, with that I think I'm safe in beginning to draw this meeting to a close, although I'll ask just if anybody on the panel has any final comments? No? Okay. Well, I thank you all for coming out this evening, and as we mentioned earlier, these proceedings are being tape-recorded and so that we will be preparing a summary transcript of this public consultation to present to the Minister. So thank you all again for coming and I adjourn this meeting.

Good evening.

PIERRE POULIN

Mesdames et messieurs, bonsoir. Au nom du Ministre de l'Environnement je voudrais vous souhaiter la bienvenue. Good evening, ladies and gentlemen. On behalf of the Minister of the Environment I'd like to welcome you. Mon nom est Pierre Poulin. Je présiderai la rencontre de ce soir. Je demeure dans la région, à Pointe-Verte. Je ne suis ni un employé du Ministère de l'Environnement, ni un employé d'Energie Nouveau-Brunswick, et mon rôle est strictement de m'assurer que la rencontre se déroule de façon ordonnée; m'assurer aussi que tous ceux qui veulent prendre la parole puissent le faire pour soumettre un mémoire ou poser des questions.

Comme vous le savez, le Ministre de l'Environnement a organisé cette rencontre publique pour discuter du rapport préparé par Energie Nouveau-Brunswick relativement à son projet de construire une ligne de transport de l'électricité de Salisbury à Belledune... Tiens, ils sont en train de nous couper l'électricité--avec tout le monde d'Energie Nouveau-Brunswick qu'on a dans la salle on devrait être correct, hein? S'il y a une panne?

J'aimerais tout d'abord présenter les personnes qui m'accompagnent ce soir. A ma droite les représentants du Ministère de l'Environnement. A l'extrême droite c'est Monsieur Kirk Gordon qui est responsable de la section des études d'impact sur l'environnement au Ministère. Et ici, Monsieur Richard Lecours, qui est un agent de planification de l'environnement au Ministère, et qui est président du Comité interministériel de révision qui regroupe les experts techniques ayant analysé l'étude d'impact sur l'environnement, et préparé la déclaration générale de révision.

A ma gauche, les représentants d'Energie Nouveau-Brunswick, le promoteur du projet. Or, vous avez ici Monsieur Charles Hickman, responsable des études environnementales, et à l'extrême gauche Monsieur Darrell Clark qui est le directeur du

projet pour la ligne de transport. Nous avons également quelques représentants, des consultants et d'Energie Nouveau-Brunswick qui sont dans la salle, et même d'Environnement Nouveau-Brunswick; des représentants d'organismes qui ont examiné l'étude d'impact sur l'environnement et qui ont préparé la déclaration générale de révision. Ils sont ici pour répondre à vos questions dans leur domaine de compétence.

I'd like to begin by introducing the individuals who are seated with me tonight. On my right are representatives of the Department of the Environment. Mr. Kirk Gordon, Manager of the Environmental Impact Assessment Section of the Department; Mr. Richard Lecours, Planner in the E.I.A. Section; Mr. Lecours is the Chairman of the Interdepartmental Review Committee, which is a group of technical experts who have reviewed the E.I.A. study and prepared a General Review Statement.

On my left are representatives of N.B. Power, who is the proponent in this case. Mr. Charles Hickman is Manager of Environmental Assessments, and Mr. Darrell Clark is Project Manager for the transmission line. Also in attendance are some representatives from the various agencies who reviewed the E.I.A. study and produced a General Review Statement. They are here to answer any questions you may have which relate to their area of responsibility.

Avant de poursuivre, j'aimerais inviter tous ceux et celles qui désirent présenter un exposé officiel et qui n'ont pas déjà signé la feuille à l'entrée de le faire maintenant. Il y a une grande feuille. Nous pourrons ainsi nous assurer que si vous voulez parler, qu'on ne vous oubliera pas. Nous vous encourageons aussi à poser des questions, à formuler des commentaires et si vous voulez le faire, vous n'avez pas besoin de signer la formule. J'aimerais mentionner aussi que les services de traduction simultanée sont disponibles. Alors si vous voulez vous procurer un récepteur, si vous ne l'avez pas déjà, vous pouvez le faire maintenant aussi. Les récepteurs sont là-bas.

Nous vous présenterons d'abord quelques courts exposés. D'abord, Monsieur Gordon du Ministère de l'Environnement vous fera une courte description du processus provincial, la E.I.E.; ensuite Monsieur Hickman d'Energie Nouveau-Brunswick vous expliquera le projet et vous fournira des renseignements détaillés sur le rapport de l'E.I.E.; et enfin, Monsieur Lecours qui est du Ministère de l'Environnement, parlera du rôle du comité interministériel de révision dans ce processus et résumera brièvement la déclaration générale de révision préparée par son comité.

We would like to begin this evening with a couple of short presentations. Mr. Gordon of the Department of the Environment will provide us with a brief description of the province's E.I.A. process; next, Mr. Hickman of N.B. Power will tell us about the project they are proposing and details of the E.I.A. report; finally, Mr. Lecours of the Department of the Environment will speak about the role of the Interdepartmental Review Committee in this process, as well as briefly summarize the General Review Statement prepared by his committee.

So first, I introduce Mr. Gordon.

AT THIS TIME PRESENTATIONS WERE MADE BY REPRESENTATIVES FROM THE DEPARTMENT OF THE ENVIRONMENT AND THE PROPONENT NB POWER (SEE PAGES 4 - 16).

PIERRE POULIN

Merci, Monsieur Lecours. Bon, c'est à votre tour maintenant de parler. Je vois, je crois qu'il n'y a personne qui s'est inscrit formellement pour présenter un mémoire, ça veut dire que n'importe qui à partir de maintenant qui voudra intervenir pourra le faire. Lorsque vous vous présentez au micro, on vous demande d'une part de vous identifier et d'autre part pour des besoins de la traduction, et de parler lentement. Les discussions sont enregistrées afin que nous puissions préparer un compte-rendu et un résumé de la consultation publique pour la présenter au ministre.

These proceedings are being tape-recorded so that we may prepare transcripts and a summary of public consultation for presentation to the Minister. I'd ask you that you identify yourselves as you approach the microphone.

Or maintenant, la parole est à vous. Toute personne qui veut intervenir vous n'avez qu'à vous présenter au microphone et poser vos questions ou faire vos commentaires. Est-ce que le projet vous affecte, est-ce que avez une bonne connaissance de l'endroit où la ligne va passer, est-ce que, je ne sais pas, est-ce qu'il y a des érablières dans le coin, est-ce que la cueillette de bleuets, des opérations forestières, la santé, la valeur des propriétés? En fait, il y a toutes sortes de questions qui peuvent être soulevées. Or, qui veut risquer le premier ou la première? Oui...

EDOUARD LAGACE

Mon nom c'est Edouard Lagacé. Je pourrais peut-être commencer par demander si que le tracé est déterminé à l'heure actuelle? Est-ce que vous avez fait un choix? Et je pense qu'il y a trois choix? Vous aviez trois choix. Est-ce que le tracé dont vous vous attendez d'utiliser, c'est définitif? Est-ce que vous avez une...

CHARLES HICKMAN

Maybe I can answer that question. At the moment, we have a proposed preferred route. That is the route that we would like to use. On the maps there are two alternative routes also identified. And so the flexibility in terms of that we have the three routes that are identified, but we have one proposed route. Within that route we have cut part of a centre line and, at the moment, we would like to stay on the route that we have identified, based on the information we are gathering on the centre line. However, there is some flexibility on either side of the centre line, depending on information that we gather as we cut the centre line. There is some slight flexibility along that preferred route.

EDOUARD LAGACE

So, the portion of the line which we are interested in... La partie de la ligne que nous autres on est intéressé dedans, est-ce qu'elle passe ici ou plus loin, ou...?

PIERRE POULIN

Could you explain to them exactly how many kilometres from here would be... Combien de kilomètres d'ici?

CHARLES HICKMAN

Jusqu'ici c'est presque 10 kilomètres.

EDOUARD LAGACE

Pardon?

CHARLES HICKMAN

It is about 10 kilometres from...

EDOUARD LAGACE

Okay. We have... Il y a déjà une ligne, il y a deux lignes qui passent juste ici près de la bâtisse, okay? Il y a une ligne qui passe près du chemin de fer, ensuite vous avez une autre option, je pense, le long de la Route 9, est-ce que c'est correct?

CHARLES HICKMAN

The preferred route is the one that is near the railway.

EDOUARD LAGACE

Si c'est ça, je pense que nous autres, en tant que résidents de la place, je pense que ça nous affecte pas tellement. Maintenant, les effets qu'on parle de électromagnétisme, vous avez mentionné? Est-ce qu'on pourrait avoir un petit peu d'explication sur qu'est-ce que ça implique, qu'est-ce que...

CHARLES HICKMAN

In terms of the residents here in Allardville, there will be no effects of electromagnetic fields associated with the line we're proposing. We're simply too far away. I think that is the simplest answer. There are electromagnetic fields associated with a transmission line and that we know very well that there's a controversy about the effects that those fields have on people, animals and birds close to the line. But in terms of this community, the fields would not be measurable this far from the line. I'm not sure if that is the answer that you were looking for?

EDOUARD LAGACE

Okay, so much for that. But what about this one here, how does it affect the people? Celle qui nous passe au-dessus de la tête? Dans quel sens que ça affecte les gens, que ça peut affecter la santé des gens?

CHARLES HICKMAN

At the moment, there have been many scientific studies completed. There is no consensus as to what the effect is, if any, on humans. There are a number of studies that are continuing at the moment that hopefully will answer some of the unknowns and hopefully, though not guaranteed, would indicate if there is a risk. At the moment, nobody is sure if there is an effect and nobody knows at what level that effects, if there is any, occurs. So we recognize at the moment, we simply do not know what, if any of the effects is magnetic fields on human health.

EDOUARD LAGACE

On ne sais pas nous autres non plus, et ça fait quarante ans qu'elle existe, puis...

PIERRE POULIN

Est-ce qu'il y a d'autres questions, d'autres commentaires? Je ne vis pas ici, mais c'est correct, c'est à 10 kilomètres d'ici, mais est-ce que vous avez l'habitude, par exemple, d'aller pêcher dans ces régions-là, est-ce qu'il y a des ruisseaux, est-ce que vous faites de la

motoneige dans ces régions-là ou du piégage d'animaux? Ou même des érablières, je ne sais pas s'il y en a dans ce coin-là, le long du tracé?

EDOUARD LAGACE

Non, il n'y a pas d'érablière dans ce coin-là. Il y a de la motoneige qui se fait, de la pêche, il y en a qui se fait aux alentours de la ligne de transmission actuelle, des aires de chevreuil, des "yards", il y en a pas comme tel qui sont dans la région qu'on a affaire dedans. C'est à peu près tout... L'exploitation forestière se fait dans les alentours de là, ça c'est une autre chose qui sera pris en considération par après.

PIERRE POULIN

Okay, est-ce qu'il y a d'autres interventions? Gênez-vous pas. On est là pour ça. Sans ça il va falloir que je vais être obligé de vous faire manger des beignes... Okay, on pourrait peut-être prendre une petite pause. Il y a du café en arrière, il y a des beignes, et vous pourrez en profiter à ce moment-là pour parler à tous les gens qui sont ici. Il y a des consultants qui sont là-bas, il y a des gens d'Energie Nouveau-Brunswick qui sont dans la salle. Si vous avez des questions, bien après ça on pourra revenir, et si vous avez d'autres questions, ne pas vous gêner, on essayera d'y répondre. Bon, on prend une pause de 15 à 20 minutes, d'accord?

BREAK / PAUSE

PIERRE POULIN

Nous commençons? Vous commencez? Ils commencent! C'est comme ça que je l'ai appris à la petite école, je ne sais pas si c'est encore de même... Okay, pendant la conversation informelle qu'on a eu tout à l'heure, il y en a plusieurs qui ont soulevé différents problèmes. Le problème avec ça c'est que c'est perdu dans les "donuts". Il faudrait venir le dire au micro pour qu'on puisse enregistrer puis que ça reste dans les archives de la commission pour que ça puisse être porté à l'attention du ministre. Une autre chose que vous avez peut-être découvert dans la pause, c'est qu'on a des gens ici à la

table qui sont bilingues--ils n'osent pas le dire, mais mon ami ici à gauche a appris son... vous avez pas remarqué que son français est aussi exquis que le chocolat suisse? C'est parce qu'il a appris son français en Suisse. Puis Monsieur Gordon qui est là-bas et qui fait semblant qu'il ne m'entend pas, lui aussi parle français! Bon, alors, il y en a un... Je sais qu'il y a quelqu'un qui avait des questions entre autres sur la coupe des arbres, qu'est-ce qu'ils allaient faire des arbres, etc. Est-ce que vous pourriez venir poser votre question pour qu'il puisse y avoir une réponse, pour qu'on puisse enregistrer la chose? Puis je sais qu'il y avait d'autres questions aussi, alors gênez-vous pas. Vous n'avez rien qu'à venir là... Oui? Edouard, vous allez être obligé de...

EDOUARD LAGACE

C'est que ma question était, mon inquiétude était vis-à-vis le débroussaillage et qu'est-ce qu'on allait faire avec les résidus. Je sais que le bois marchand va être vendu, ils n'ont pas le choix. Mais les résidus qui vont rester, les faîts d'arbres et tout ça? J'avais peur que ce soit brûlé, mais on m'a assuré que ce serait pas brûlé, ce serait compacté. Donc, moi, dans mon travail, ça me satisfait.

PIERRE POULIN

Est-ce que Monsieur Hickman a un commentaire là-dessus à ajouter?

CHARLES HICKMAN

Oui, mais en anglais! Je connais les mots en anglais, mais pas en français. Comme nous avons discuté un peu, nous allons couper les arbres... Excusez-moi. The merchantable timber will be sold, taken off the line after being stacked, and all the limbs, the branches, the small material will be compacted along the side of the right-of-way with gaps so that the animals, the deer can traverse the right-of-way without any problems. We very, very seldom burn any material on the line, if we do we will be applying to a license for permits as required.

RICHARD LECOURS

Bon, juste pour résumer ses commentaires en français, c'est que qu'est-ce qu'ils font pour le gros matériel, oui c'est vendu, le bois qui est coupé. Pour les résidus, les branchages, etc., ça c'est compacté le long du site et ils vont laisser des pistes pour permettre aux chevreuils et d'autres animaux de passer par le corridor, qui serait laissé pour la ligne de transport. Et en plus, occasionnellement, ils vont suggérer de faire, de brûler certains matériels, mais ça c'est dans des rares exceptions, et lorsque c'est fait ils vont demander permission avant de faire ce genre d'approche. Alors, vous seriez consultés. Bon, c'est ça.

PIERRE POULIN

Est-ce qu'il y a d'autres? Je sais qu'il y en a qui avaient parlé aussi des champs magnétiques et des animaux. Est-ce que vous pourriez venir poser votre question? C'était l'effet des champs électromagnétiques sur les animaux de la forêt. Qui avait cette question-là tantôt? Qui c'était? Je ne me souviens plus qui c'était, mais c'était l'effet... Ah, c'est toi là-bas, la casquette bleue! Alors c'était l'effet des champs électromagnétiques sur les animaux. Ton point était que étant donné que les animaux ont une ouie plus sensible ça pourrait les affecter. Je pense que c'était ça. Est-ce qu'il y a une réponse à ça?

CHARLES HICKMAN

Peut-être je peux répéter la même chose. Il y a quelques personnes qui ont fait des études, qui ont cherché les effets sur la faune, mais en ce moment, les scientistes ne sont pas certains s'il y en avait, ou s'il y en a. Ils ne savent pas... They don't know how great an effect it is. They are still studying to try and find just exactly what the effects of magnetic fields are. At the moment, we are not certain.

RICHARD LECOURS

A part du commentaire de Monsieur Hickman, j'aimerais mentionner que pour les effets sur les animaux en particulier, en général les études qui se font sur les champs magnétiques, on regarde quand les gens sont exposés pour au moins une certaine période

de temps, mais pas pour quelques minutes, une heure ou quelque chose comme ça, mais des temps plus importants que ça. On parle des mois, des années. Et alors dans cette situation-là les effets sur les animaux seraient très minimes, parce qu'on voit même pas vraiment nécessairement un effet sur les humains qui sont exposés pendant des périodes très prolongées.

Deuxièmement, ils ont regardé par exemple, la situation des vaches. Souvent on va voir des animaux agricoles... des animaux de ferme, pardon... qui seraient en-dessous d'une ligne de transport parce que c'est une combinaison d'utilisation très utile. Et là avec des études, en particulier avec les vaches, ils ont prévu même un effet quelconque dans ces études-là. Il y en a encore d'autres qui se font, mais dans cette situation-là où les animaux sont présents sous la ligne pendant des heures et pendant des années, il n'y a pas eu d'effets. Alors, c'est certain qu'avec la situation d'animaux comme des chevreuils qui passent ce serait vraiment, ce serait pas une chose qui serait probable de causer un effet.

PIERRE POULIN

D'autres questions ou d'autres commentaires que vous aimeriez faire? Jean-Guy...

JEAN-GUY ROBICHAUD

Bonjour. Mon nom est Jean-Guy Robichaud. Juste un commentaire qui est venu durant la pause. Sur les poteaux, sur les pilons, il va y avoir ce qu'on appelle des "guy wires", des guides. Qu'est-ce qu'il va avoir comme protection si des gens vont se promener sous la ligne? Est-ce qu'il y a... Je sais qu'il y a des histoires jaunes qu'on met dessus là, mais c'est souvent que ces histoires-là sont parties. Est-ce qu'il va y avoir un effort spécial pour les garder en ordre?

DARRELL CLARK

John Kingston is our Construction Superintendant for the lines and one of the things that he mentioned in that regard was that they are looking at improved methods to ensure that these things stay in place when they are installed. They are also looking at a wider use

of the guy guards to make the guys more visible. One thing that they're also considering is to put a strip of reflective tape on the guy guards so that it would show up for snowmobilers, that sort of thing.

PIERRE POULIN

Okay. Autre chose?... J'ai peut-être une autre question. Je sais qu'à Allardville vous êtes quasiment la capitale du bleuet. Est-ce qu'il y a des gens qui vont ramasser des bleuets dans ces coins-là? C'est parce qu'ils vont faire de l'arrosage pour le contrôle des pousses. Est-ce que ça pourrait avoir un effet sur la récolte des bleuets?

RICHARD LECOURS

Tu poses la question...

PIERRE POULIN

Je ne devrais pas poser de questions, mais ça l'air que vous cueillez pas de bleuets si loin que ça.

MEMBER OF AUDIENCE

Peut-être pas nécessairement sur la récolte des petits fruits, mais sur l'environnement, disons le poisson et ces choses-là, le type d'herbicide qui va être utilisé, est-ce que c'est un herbicide qui, disons, est exempt de toxicité envers les poissons?

CHARLES HICKMAN

The herbicides that we use are called Tordon and Dycleer. They are two herbicides that have been approved for use in New Brunswick. I have to admit I am not myself familiar with the background studies they have done on the toxicity, but the permit that we get from the province to use the herbicides require that we maintain a certain distance back from watercourses, from drinking water supplies areas, from agricultural areas, from Christmas tree farms, and numerous other restraints. Those regulations are designed to ensure (unclear on tape) of fish habitat, and that any human activities can be carried out

quite safely with no effect from the herbicides. It's an issue that a lot of people have concerns about... (unclear on tape)... from the province we have a special person ourselves who is with the spray crew, which is a licensed crew, whenever they are doing any spraying. Just for your information, we would only be spraying a line very infrequently. We'd normally spray a couple of years after we build a line, but after that, our vegetation control only takes place in a five- or seven-year cycle, and we might only spray every third cycle, for instance. So, you might only get spraying on a line--and this is a generality--but say, every twenty years or fifteen years.

RICHARD LECOURS

Bon, pour résumer brièvement ce que Monsieur Hickman a dit c'est que, ou je vais peut-être mettre mes propres mots là-dedans, finalement ce qu'il a dit c'est qu'il se sert de deux produits de pesticides qui sont utilisés couramment dans la province. Il faut dire que le Ministère de l'Environnement s'implique dans la réglementation de l'utilisation de ces produits, et on a des contrôles très spécifiques sur leur utilisation. En particulier comme tu disais, sur l'habitat des poissons, on a mentionné les zones tampons, les régions qui sont souvent très éloignées où ils ont pas droit de s'en servir proche des cours d'eau, et aussi dans les terres agricoles, et dans d'autres utilisations qui sont identifiées par le Ministère de l'Environnement. Et le plus important c'est qu'il y a une surveillance qui se fait, à part de ce que Energie Nouveau-Brunswick a leur propre personne--s'ils vont donner un contrat à quelqu'un pour faire ce travail, eux vont superviser, mais nous aussi nous allons superviser ce travail pour vérifier ces faits selon nos... Et comme il l'a mentionné, dépendamment de la croissance des herbes le long de la ligne de transport, l'utilisation de ces produits se fait très rarement. Au début après deux ans ou trois ans si je crois bien, puis après ça, ça peut être de cinq à dix ans, pas encore après cinq à dix ans de cette date-là, alors ça se fait très peu fréquemment. Le restant du temps s'il y en a un besoin c'est fait de façon mécanique. S'il y a des zones qui sont identifiées comme étant sensibles, à ce moment-là ils vont le faire encore par des méthodes mécaniques ou manuelles.

PIERRE POULIN

Oui, une autre question?

JEAN-GUY ROBICHAUD

C'est pas une question. Moi je suis l'administrateur du site d'enfouissement sanitaire que vous allez passer à côté de nous autres à Red Pine Station. La réglementation que nous autres on est obligé de travailler avec au niveau de toute la pollution est très exigeante. On a besoin de faire des analyses régulières, au minimum une fois par mois. Ce que je demanderais au nom de la commission c'est si... Du moment que vous décidez d'arroser avec des pesticides, je crois que la commission apprécierait beaucoup qu'on soit prévenu. Comme ça on pourrait dire, okay, il y a des échantillons pris avant et il y a des échantillons pris après, puis on a un ruisseau qui abouti à côté du site. Je ne voudrais quand même pas que s'il y a quelque chose qui tombe dans le ruisseau qu'on ne peut pas donner de réponse, on a un comité de surveillance qui est là pour garder un oeil sur nous autres. Puis si on ne peut pas expliquer pourquoi il y a certains éléments dans le ruisseau, bien ce serait à l'avantage de tout le monde de dire, "okay, on va là pour quoi si des résultats ont changé aujourd'hui?"

RICHARD LECOURS

Mais moi je peux répondre un peu à ça. Je suis certain qu'Energie Nouveau-Brunswick se porterait volontiers à vous aviser là-dessus, et en plus s'il y aurait le besoin, on serait dans une position d'inclure ça comme une exigence lors du début de ce travail-là. Alors, on pourra en parler au ministre sur ce sujet.

JEAN-GUY ROBICHAUD

Nous autres, lorsque... Pour faire accepter le site où il est présentement, les gens ont demandé d'avoir un comité indépendant de la commission, puis composé de gens de la région qui sont impliqués au niveau de l'environnement, puis ils viennent vérifier les résultats des analyses que je suis obligé de faire à tous les mois. Et puis s'il y a des changements drastiques ou des changements plus ou moins importants, il serait bon de

pouvoir dire bon, okay, une des raisons, bien... Okay, c'est pas le site lui-même, c'est le site plus quelque chose d'autre, puis les éléments sont là, ils sont pas nocifs ou ils sont nocifs. On aurait une explication, puis tout le monde serait content.

CHARLES HICKMAN

Certainly we will undertake to inform you and your commission of any time that we will be spraying close to the dumpsite. So, that we recognize that it is very important that you are aware of our activities and how they may affect those. We will tell you in advance. Thank you.

PIERRE POULIN

Un homme averti en vaut deux. Est-ce qu'il y a d'autres questions, d'autres commentaires? Sinon, on va vous remercier de votre participation, de vos questions, de vos commentaires qui seront pris en considération au cours de ce processus, et je vous dis bonsoir.

BRIAN NEWBOLD

My name is Brian Newbold and I'll be chairing tonight's meeting. I live in Moncton, but I am not employed by the Department of the Environment or N.B. Power. My role this evening is to ensure an orderly meeting, and to make sure that everyone who wishes to make a presentation or ask questions is given the opportunity to speak. As you know, the Minister of the Environment has called this meeting to discuss the E.I.A. report prepared by N.B. Power on their proposal to construct a transmission line from Salisbury to Belledune.

I'd like to begin by introducing the individuals who are seated with me this evening. On my far right are representatives of the Department of the Environment. Mr. Richard Lecours, is a Planner in the E.I.A. Section, is the Chairman of the Interdepartmental Review Committee, which is the group of technical experts who have reviewed the E.I.A. study and prepared the General Review Statement.

On my left are representatives of N.B. Power, which is the proponent in this case. Mr. Charles Hickman is Manager of Environmental Assessments, and Mr. Darrell Clark is Project Manager of the transmission line. Also in attendance are some representatives from the various agencies that reviewed the E.I.A. study and produced the General Review Statement. They are here to answer any questions you may have which relate to their area of responsibility.

Before we go any further, I would like to mention that those who wish to make a formal presentation and have not already signed the sheet at the entrance, should do so at this time. This will help ensure that everyone who wishes to speak will have an opportunity to do so. We also encourage informal comments and questions, but it is not necessary to

sign the sheet for that. I would also like to note that simultaneous interpretation is being provided, so if you would like to pick up a translation device, you can do so at this time as well.

J'aimerais mentionner aussi que les services de traduction simultanée sont assurés. Alors si vous voulez vous procurer un récepteur, vous pouvez le faire maintenant aussi.

We would like to begin this evening with a couple of short presentations. Mr. Lecours of the Department of the Environment will provide us with a brief description of the province's E.I.A. process. Next, Mr. Hickman of N.B. Power will tell us about the project they are proposing and give details on the E.I.A. report. Finally, Mr. Lecours will speak on the role of the Interdepartmental Review Committee in this process, as well as briefly summarize the General Review Statement prepared by his committee. Mr. Lecours...

AT THIS TIME PRESENTATIONS WERE MADE BY REPRESENTATIVES OF THE DEPARTMENT OF THE ENVIRONMENT AND THE PROPONENT NB POWER (SEE PAGES 4 - 16).

BRIAN NEWBOLD

Merci, Monsieur Lecours. Thank you very much gentlemen. Before we begin hearing briefs, I'd like to note that everyone is welcome to participate in these proceedings. It is not necessary to make a formal presentation. All you need to do is approach the microphone. To assist the translators, I'd ask that you speak slowly.

Il n'est pas nécessaire de présenter un exposé officiel. Vous n'avez qu'à vous présenter au micro. Pour aider les interprètes, je vous demanderais de parler lentement.

These proceedings are being tape recorded so that we may prepare transcripts and a summary of public consultation for presentation to the Minister.

I'd ask that you identify yourselves as you approach the microphone.

Les discussions sont enregistrées afin de préparer un compte-rendu et un résumé de la consultation publique pour les présenter au ministre. Je vous prie de vous identifier en vous approchant au micro.

Thank you very much. Merci.

Our first presenter is Mr. Mike Doyle of the New Brunswick Wildlife Federation.

Mr. Doyle.

MIKE DOYLE

Mr. Chairman, Members of the Review Panel, Ladies and Gentlemen. My name is Mike Doyle and I represent the New Brunswick Wildlife Federation.

Today, wildlife habitats are being destroyed or displaced at an alarming rate. Industries insatiable appetite for wood products and man's civilized desire for property development, super highways, super malls, etc., represent a very significant impact on the availability of these essential areas.

Power transmission right-of-ways, too, have a very obvious and adverse effect on habitats. Their ubiquitous nature represents 5500 kilometres of permanent scars throughout New Brunswick's landscape. The land area consumed by these right-of-ways exceeds 49,000 hectares. Incidentally, these figures are only current to 1972.

Whether these necessary evils of development are a result of public or private demands or are simply to appease the profiteers, is immaterial since all of the foregoing are established facts.

Not only are transmission right-of-ways permanent, but the land they have displaced is non-renewable.

Tens of thousands of hectares of renewable forest is regulated to prairie status, and subsequently unproductive for both wood fibre and wildlife habitat. Therefore, how can a dollar figure adequately justify the loss of a renewable resource.

Transmission right-of-ways interrupt select areas of mature coniferous stands representing critical habitats for certain wildlife species such as martin, fisher and wolverine.

Other critical areas adversely affected are deer wintering areas. The sensitive nature of these particular habitats renders them very susceptible to major disturbances, such as transmission right-of-ways, which disrupt our continuity, thereby creating eventual adverse consequences on resident white-tailed deer populations.

The proposal to cut portions of deer wintering areas raise additional concerns as well. How many deer constitute a deer wintering area? How many deer wintering areas have been identified along or adjacent to the proposed right-of-way which are currently unpopulated or inactive?

Will the right-of-way be cut on the fringe of the deer yards or will it be cut through the core proper?

If a particular yard is disrupted severely, are adjacent stands available to accommodate a possible relocation by the resident herd of white-tails?

Therefore, we believe the integrity of these extremely critical habitats must be maintained to allow our wildlife to realize their natural potential.

The aesthetics of these prairie like right-of-ways leaves a lot to be desired. Certain methods used to maintain this lifeless appearance, however, are more than cause for concern. The major concern in this case being the application of herbicides for vegetation control along the lines.

The potential and/or obvious risk to wildlife and ultimately humans, cannot be taken lightly.

Signage alerting people to herbicide application activities are posted in appropriate areas along the transmission right-of-ways. With all due respect, a certain degree of illiteracy does exist in New Brunswick. Therefore, these signs are small consolation for those persons. And needless to say, our animal populations cannot read. Thus, can we assume that these chemicals eventually enter the food chain, part of which we consume in the form of venison and fish.

The use of these chemicals raises several other areas of concern. Are these herbicides water soluble? Do herbicides readily bio-degrade in the soil? Do herbicides contain dioxins? What is the acute toxicity of these chemical products?

Do residues of these substances biocumulate in the meat and/or organs of wildlife ingesting sprayed vegetation? Do herbicides have an adverse effect on the reproductive potential, growth and survival in natural populations of animals and fish?

Are there any adverse effects on the distribution and abundance of resident wildlife populations in the immediate areas surrounding the right-of-ways?

Thus we believe that the use of herbicides is hardly a safe or environmental friendly alternative for vegetation control.

Current environmental protection regulations intend to mitigate the potential impacts of these dilatorious substances. However, if the acts cannot guarantee the prevention of accidental contact or discharge of these chemicals, then the user must develop alternative vegetation control methods.

Several other methods exist which are much more forgiving than chemical sprays. Contemporary vegetation management techniques must minimize environmental impacts and preserve the right-of-way as a semi- wilderness area where native, compatible, well-growing vegetation thrives and, ultimately, provides increased food supplies and shelter for numerous species of wildlife.

To enhance or maintain the presence of low-growing vegetation on transmission right-of-ways, will avoid soil erosion and subsequent siltation effects on streams, prevent forest fires, protect watercourses, reduce the detrimental aesthetic impacts on the environment by minimizing the visible scars on the landscape and provide a diverse complement of compatible plant species.

In addition to the foregoing attributes, critical wildlife habitats will be maintained which will ultimately serve to enhance wildlife populations.

During the past fifteen years, the results of several studies indicate that the electromagnetic fields in proximity to high current carrying conductors, such as transmission lines, can be harmful to humans. Potential harmful effects include impacts on the brain, the body's immune system, certain body cells, and is also suspect as a cancer enhancing agent.

It is a proponent of others in New Brunswick currently conducting research on electromagnetic fields to determine their potential consequences.

Transmission lines passing through wildlife habitats subject all animals to repeated and prolonged exposure of electromagnetic fields.

What will happen to animals which do not avoid and frequent these areas? Can we assume these animals will eventually suffer the same consequences as those experienced by humans? Until we recognize electromagnetic fields as a major potential health threat, assumptions are a poor substitute for credible scientific evidence.

Attitudes toward our wildlife and our forests and subsequent wildlife habitats must change. These precious resources are much more than mere commodities. They are a major component of a great community ... a community which provides mankind with maximum benefits.

The future well-being of our wildlife in their habitats today, more than ever, is at our discretion. Major users especially must create and promote appropriate management objectives which address the natural significance of wildlife habitats so as to maintain the integrity of our vast and diverse ecosystems.

Thank you very much gentlemen.

BRIAN NEWBOLD

Your report ... your presentation actually, you know, raises quite a series of questions. Maybe what I could do is ask for people on the panel to respond to that if this is your pleasure ... either from the proponent or the department.

For instance there's one on page, I guess the first page really, where you mention, you know, about the dollar figure adequately justify the loss of a renewable resource. Well then, anyone want to take that one on ... Mr. Lecours? Mr. Hickman?

RICHARD LECOURS

Well at least from the point of view of the Department of the Environment, there's not a compensation offered. What they did do in the report is describe what the dollar loss would be at least in terms of marketable timber. Ultimately, the question, at least from the government perspective, apart from any existing policies, reduces this down to, is the requirement for the project justify the loss of habitat and what I'm getting from your comment is your concern that that question should possibly be examined in further depth and I think that essentially sums up your point on that aspect.

MIKE DOYLE

Pretty well. I guess where I was coming from was reference to the indicative figure of displaced wood products and also as I indicated, this section of ground now is lost. It's nonrenewable. My point, I guess, this year, during 1991, all the timber companies combined in New Brunswick will harvest a volume of wood equal to the amount of wood fibre that grows in our forest during that same year.

So barring any major forest fires, or major infestations by insects and things like that, in New Brunswick our forests are really only holding their own. Now if we keep taking away from it, we are losing. So I guess, you know, that was my point mainly. You know, can we afford to continue this loss to ...? Okay. Thank you.

CHARLES HICKMAN

Just one small additional comment I can make is that, yes obviously, it's not possible to grow timber products for the pulp and paper industry or for the saw log industry, on the right-of-ways, but it's certainly possible to practice other activities such as Christmas tree farming and agricultural activities within the right-of-way, so although I agree 100% it's taken out of the wood fibre industry, it certainly is not lost to the sustainable basis of New Brunswick agriculture activities, and that's just an observation.

MIKE DOYLE

Sure

BRIAN NEWBOLD

Now on page 2 you mentioned under additional concerns, a number of questions. How many deer constitute a deer wintering area?

MIKE DOYLE

What criteria did you people use, you know, to determine what is a yard and what isn't a yard with regards to the population of the existing resident herd?

CHARLES HICKMAN

During the study we used, basically, information that was available from the Department of Natural Resources and local biologists, plus the expertise available within the consulting company itself, and based on the information from the government departments, we identified deer wintering areas.

Within the corridor they identified, I believe, it was approximately 69 deer wintering areas within that corridor.

During the route selection study, deer wintering areas were recognized as being of major concern which we should try minimize all interaction as far as possible. In fact by the end of the route selection study, we'd managed to avoid, I think, 66 of those 69 deer wintering areas. We only interact with 3 of them, that is what it comes down to.

In perspective we, the 50 meter wide corridor, the right-of-way, will take out less than 2%. I think it's 1.5% of the deer wintering areas that it interacts with and Natural Resources at the moment allows cutting of up to 30% of a deer wintering area as a suitable activity within a deer wintering area.

MIKE DOYLE

Is that in one block though or is that staggered in sections?

CHARLES HICKMAN

I believe that's within one block but I would have to, you know, consult with them for confirmation.

MIKE DOYLE

Well, I'm of the other opinion. You can afford to take staggered strips out of this here ... out of the deer wintering area, but you cannot take out a section that's so large that it interrupts the integrity of the yard, therefore, in effect causing the deer to relocate maybe in one section of the yard not utilized by the other, because specially I mean, yards are used in the critical months of the year ...

CHARLES HICKMAN

Yes, I know.

MIKE DOYLE

And you have a huge wide 90 meter swath type of thing and what you have there, what you've created, is a huge wind tunnel and things like that, so they are very reluctant to cross those things.

CHARLES HICKMAN

Can I ... just one point there. You mentioned the 90 meters as well. The right-of-way for this line is only 50 meters. There's possibly a misunderstanding, this line, the right-of-way, is only 50 meters, and where landowners have been willing, we have asked for an easement, if they've been willing, for an extra 40 meters for future considerations if we ever have to build another line. But for this project, all we need is a 50 meter right-of-way. Okay.

MIKE DOYLE

Okay, I realize that but if you intend to put another line there in the future does that mean that later on you'll come back and cut down another 40 meters type of thing? If need be, that's what you're going to do.

CHARLES HICKMAN

If need be, and if that route is still acceptable, because there's no say that it will be an acceptable route in the future. And assuming that the deer wintering area hasn't moved. We have word that they do move on a regular basis. When we first selected this route, one of the deer wintering areas wasn't on the route and has now moved onto the route, and so depending on future considerations, if that route is still acceptable, yes, we will be moving.

MIKE DOYLE

When you reviewed the yards, did you use a certain number to determine, you know, if it was a substantial yard or one that should be saved, or if you seen deer that was it. You know, you tried to stay clear of that.

CHARLES HICKMAN

I'll have to ....

MIKE DOYLE

You know, in other words 5 or 6 deer to ...

CHARLES HICKMAN

I'll have to turn that question over to the Natural Resources representative or our consultant. I know the information was gathered for the department ...

MIKE DOYLE

Really, where I'm coming from, I don't believe this year or when this study was done ... last year perhaps?

CHARLES HICKMAN

The data was gathered '88 ... '89 in ....

MIKE DOYLE

Okay, within the last week, we've just come off of two really, really terrible winters here and the deer herds, at least in the northern part of the province are decimated, to say the least. We don't believe ... just as a good indicator of a, you know, our deer the past year, deer potential in the northern part of the province and, you know, I can take you myself to numerous areas which had substantial herds of deer 5 or 6 years ago, which now may only contain 4 or 5, 6 deer type of thing. So with that in mind, with the ... as I indicated also there may be certain areas of that particular yard or yards which are inactive at the moment but if we could get our deer herds back on their feet, then they would reclaim all those original areas so, you know, we feel it is a poor indicator to do that assessment right now.

But, you know, on the other hand we certainly appreciate the ... there's obviously been an effort to avoid deer yards if you've determined there were 69 and you're only going to affect 3, so we appreciate that.

BRIAN NEWBOLD

I think you touched, in fact, touched on question 3 because, you know, how many deer wintering areas have been identified along or adjacent to the proposed route, which are current and then, of course, that which are currently unpopulated or inactive. Would you care to respond to that?

CHARLES HICKMAN

Again I will ask, I will address that in a moment, but my understanding is that the deer wintering areas that were identified included known areas that had been used as deer wintering areas as well as areas that were known to be moving and had changed their

location with time. Perhaps Mr. Barnes and WMS Consultants can provide a little more information on that point.

JEFF BARNES

Yes. My name is Jeff Barnes from WMS Associates. We actually consulted with Natural Resources mainly as our main source and also the regional biologists, and as you say we did try to avoid in the route selection process those which we affect, but there's some important points that you raise, there is some concern about deer use of the right-of-way and the critical time is in the winter as you suggest. And there is some literature which would indicate that in the winter they would not use this habitat, the actual right-of-way itself. They would only use it to cross the right-of-way. But the literature does support that deer will cross the right-of-way and go back and forth between, say, the critical habitats.

The other thing that Charles mentioned was that our indications are that it will be affecting about 1 1/2 to 2 1/2% of the 3 deer wintering areas that would be crossed, which is a very small portion, admittedly a long corridor but the literature would suggest that they would cross back and forth so we don't feel that this is that significant an impact as a result of that.

MIKE DOYLE

The ... I guess if the biologists indicate that they do cross willingly, I have to live with that because I'm no biologist and I certainly don't profess to be. But I've also talked to one of the big game biologists in the province here, namely Dr. Boer of UNB, and he suggested the forest companies for example, had a ... when they cut their blocks out that their access roads be maintained as narrow as possible, rather than cut out a 50 foot road, try to only cut out a 30 foot road type of thing. Because there are instances where deer are very reluctant to cross these here tunnels, these wide open spaces rather.

CHARLES HICKMAN

Well certainly I can say that the access roads that we cut, are kept to a minimum. Wherever possible, we don't cut a new access road at all. And, for instance, going through the deer wintering area, we generally would not cut a new access road. We would use the transmission corridor itself as access to any structures within the area.

MIKE DOYLE

Well that's ....

CHARLES HICKMAN

Again, we would certainly ...

MIKE DOYLE

I believe that's certainly something that can be prevented is the access roads through deer wintering areas.

CHARLES HICKMAN

That's correct.

MIKE DOYLE

And sensitive areas as well, you know along the streams and things like that.

CHARLES HICKMAN

Yes, within the Environmental Protection Plan, the whole question about protection of streams is dealt with in some detail and we have a commitment and, basically ground rules if you like, whereby we will not go within 15 meters of a stream. There will always be a 15 meter buffer along side a stream, vegetated buffer. For streams where there's a bank slope that's more than (indistinct)%, we'll be back 30 meters. There will be a 30 meter vegetated buffer in order to protect against siltation and any potential effects on fish habitat. And really on a steeper bank, the buff is that much greater.

Within that buffer, for instance, there will be no heavy vehicles allowed. There will be no cutting of trees ... they will not be clear-cut. We will maintain vegetation that is compatible with the line. So, for instance, there will always be public wilderness, for instance along side stream banks And that's for exactly those reasons we wish to be able to maintain a wildlife corridor. We will maintain a buffer strip to protect the fish habitat.

We recognize very clearly that that is an important wildlife benefit, if you like, or a protection process.

MIKE DOYLE

Sure. Cause it has ... it doesn't only have an impact on the transmission right-of-way. I mean we're talking, you know, X number of miles downstream as well depending on the impacts like, you know, vehicles travelling through stream beds.

Perhaps maybe I'd like to take advantage of this opportunity to maybe to raise that question is vehicles in stream crossings. You know, how do you propose to mitigate those there things like that?

CHARLES HICKMAN

The ground rules that we have in place at the moment basically state that we will not have a vehicle in the streams. Period.

Whenever possible, either during construction, or during the maintenance activities, we will go around, we will go to within ... we will go the edge of the buffer zone ... we will come back, go out to the road, go over a recognized bridge, and back to the transmission line on access roads.

If there's no easy usable road such as an access road or a bridge close by, we have to apply before we can go close to a watercourse, the Watercourse Alteration permit under the provincial Clean Environment Act. Under that permit, we apply for a stream crossing

technique and in the protection plan we list a number of techniques that may be applicable under certain circumstances on certain streams, and that includes everything from a culvert, a bridge. In some areas the province has recognized fording areas that basically got ledge rock and there's no spawning habitat, for instance, where it's actually acceptable to cross the stream by fording.

We've laid out in the EPP, the protection plan, a number of mechanisms. Depending on the individual conditions that are found in the field at the time when the equipment needed to get across, the most appropriate environmentally sound crossing mechanism would be applied, but the first choice every time is to ford the stream. I would just ... the definition of a stream that's used is "any body of water .5 meters wide or greater", so we're not just talking about the Cains or the Miramichi or anything, we're talking about every stream ...

MIKE DOYLE

No, that's just it. They're all part and parcel of the whole system ...

CHARLES HICKMAN

So you see that we recognize how important they are especially for the spawning habitat, the (indistinct) habitat of juvenile salmon and trout, and that's why we've made the commitment that we will try and ford water crossings wherever possible, and even where we're not avoiding them, we will maintain a buffer strip on either side of the streams

MIKE DOYLE

I can certainly appreciate your commitment to that concern but you will have to forgive me for, I guess, being a, pretending to be a Doubting Thomas because I've seen some horrific examples of a repair crew utilizing streams with little regard for the fact that they were specially, you know, fish habitats and that type of thing.

CHARLES HICKMAN

We recognize that in the past that nobody I think has been perfect in any way, shape or form. I think that with our growing awareness in environmental concerns of the importance of some of the smaller streams has led to the development of this Environmental Protection Plan. Within the protection plan, we have a commitment to employ what we have described as an environmental co-ordinator and his job, if you like, is to act as a resource person to educate and train our crews to increase their awareness in the field about what counts as valuable habitat. Not just from the fisheries point of view but also from rare and endangered species of numerous kinds, plant species and so on, to basically try and further educate the existing crews and our people, and also to act as a resource if contractors have a question about the best way to cross a stream or a water cross.

We believe, and we hope, that with these efforts, we can increase the standard of our work in the field to an even higher level. I'd like to think that along the many kilometres of lines that we have, generally speaking, we've done a not too bad job. I wouldn't say it's perfect. It never is perfect but we are certainly committed to try and improve our performance and maintain a very high standard.

BRIAN NEWBOLD

Monsieur Lecours, vous avez un commentaire je crois?

RICHARD LECOURS

Oui, mais mon commentaire c'était que... when we were still talking about deer yards and I've left that behind.

I just want to ... are you satisfied with this discussion so far on deer yards or were you looking for some specific responses for example on the part ...

MIKE DOYLE

No, not really. That was my main concern is ... I realize now that you're only impacting 3, so I guess really it's the location or the portion of those yards that you're impacting. You know, as I had indicated, if it's just on the fringe perhaps that will have no adverse impact on them at all.

But if, I believe, if it is through the core I mean, you know, these animals are territorial and within their territory they have a certain quarry area. I probably don't have to explain this to you but there is a quarry area that they utilize 80 or 90% of the time, and they'll drift east, west, north or south, whatever, in search of food and this and that, but they'll always return to this quarry area, and that's the thing. If you cut through that, you know, are you going to .....?

RICHARD LECOURS

Okay. Well, I think I understand the point that you're making and there's a DNRE person and a Natural Resources and energy person here as well and those points will certainly be considered and brought to the attention of the Minister and I think we appreciate what you're saying.

MIKE DOYLE

Fine.

BRIAN NEWBOLD

I was just wondering, the other speaker at the microphone, did you wish to make comments in regard to the questions actually raised or is it something ...?

UNKNOWN

I had a number of comments to make about what has been raised ...

BRIAN NEWBOLD

About what has been raised. Maybe you should raise them right now ...

UNKNOWN

... so far.

BRIAN NEWBOLD

... because I think we'll retain the information better and then we'll go on with the others.

FRED METH

Okay. My name is Fred Meth. I'm the Director of Environmental Affairs at NB Power. I just wanted to compliment Mr. Doyle for the very constructive measures that he mentioned early on in his presentation. There were a number of issues there, or a number of measures, which I think are constructive criticism and some of those you will find are contained in the Environmental Protection Plan that we've been talking about. If they're not all there, I would commit here to review that plan before it's finalized and determine whether in fact, the suggestions that you've made can be incorporated into it. That was one point.

Secondly, there is a ... you talked earlier, now moving back from deer yards, you talked about compensation for land which is taken out of forest production. I just want to make a point that when we buy land, we, or when we buy right-of-way, we pay essentially the market value for that and that generally does reflect the present value if you will, of the production that you might expect to get off that land, and you pay more for a good woodlot than you do ... a good natural woodlot than you would for scrub bush or something that has been high graded.

You would pay more for an actively managed woodlot than you would for one which wasn't managed.

You would probably ... if you had a woodlot that was completely under plantation ... (end of tape 1).

(start of tape 2)

Another principal that we use when we, and it's only one of the criteria that we use when we're doing route selection, but one of the criteria that we do use is to, when it's at all possible, to avoid land which is actively managed for one or other use, and that could be forestry, it could be agricultural land and sometimes you don't have any options. Sometimes you have to go across that kind of land.

But where it's at all possible, we do try to avoid land that has value added from some type of man's activities and, in fact, even by nature's efforts sometimes there's value added to land. If there is a particularly valuable habitat or something, we try our very best to avoid those when we can. So there is that selection criteria that we do use.

Just on the ... one more point on the issue of deer yards. I think if there is a break later on or perhaps following the meeting, we can go through any specific areas that you might have a particular concern about, and see whether we can accommodate just staying on the fringes instead of ...

BRIAN NEWBOLD

Alright. Thank you. I'm going to proceed with the other questions. The fourth question was will the ROW be cut on the fringe of the deer yards or will it be cut through the core proper which you have touched on a little bit. Would you like to respond?

CHARLES HICKMAN

To get the specifics on that one, we'll have to sit down with the maps to show the deer yard relative to the right-of-way and I have to admit at this stage that the mapping has been done on a one-fifty thousand scale and I don't know if that is going to have enough detail at this level, but we can easily get more details as to exactly where that yard is.

BRIAN NEWBOLD

Okay. And then the next one was if a particular yard, yards, is disrupted severely or adjacent stands i.e. those that meet the necessary criteria of a DWA available to accommodate a possible relocation by the resident herd of white-tails.

CHARLES HICKMAN

Again, I think we will have to review the actual location of the line relevant to the deer yard to find out whether or not we do have a severe disturbance. Likewise we'll have to, if there's a severe disturbance, there is some flexibility within the line in the sense that what we have proposed is a central line at the moment. There's a little bit of flexibility on either side of the central line and if it turns out that we are going through, as you indicated, a core section of a deer yard, we do have some flexibility to try and avoid the core area, and perhaps move it more along the fringe.

As indicated, one of the dangers is that deer yards move, so it may turn out to be a moving target. But again, we'll review the actual deer yard with the right-of-way and find out what that situation is.

MIKE DOYLE

Okay. Perhaps, you know, just to add some explanation to that particular question.

Where the ... when you tried to determine deer yards, were you concentrating merely within the compounds of the right-of-way or were you looking say within,you know, half a mile to a mile on either side to see if there was other potential sites for deer wintering areas?

CHARLES HICKMAN

When we were looking at the route selection, we looked within the 15 kilometre wide corridor as to where the deer wintering area was. Wherever possible, we tried to avoid any

of the deer wintering areas, and these 3 were unavoidable due to the constraints caused by other activities.

I don't believe that we've done a detailed analysis of forest stands on either side of a deer wintering area. Again, that information can be gathered very easily since all the forestry data, all the timber harvest data, is broken down by stand for each individual area and will give us a good indication as to whether or not there are adjacent stands.

Again, hopefully, we can avoid any critical areas and we can try and stay close to the fringes of a deer wintering area and thus, hopefully, we won't disturb it in the first place.

MIKE DOYLE

Okay.

BRIAN NEWBOLD

Okay. Further down the page, Page 2, another concern, a major concern, in this case being the application of herbicides for vegetation control along the lines and then this leads to a question thus can we assume that these chemicals eventually enter the food chain, part of which we consume in the form of venison and fish.

RICHARD LECOURS

If I could have first crack at that one. There's a ... actually you have a number of questions which all relate around that same subject.

MIKE DOYLE

They're all on the same subject.

RICHARD LECOURS

And just to recap them for everyone here ... are these herbicides water soluble?

Do herbicides readily bio-degrade in the soil?

Do herbicides contain dioxins?

What is the acute toxicity of these chemical products?

Do residues of these substances biocumulate in the meat and/or organs of our life ingested sprayed vegetation and do they have an adverse affect on the reproductive potential growth and survival on natural populations of animals and fish?

And finally, are any adverse effects on the distribution and abundance of resident wildlife populations around the right-of-ways, I assume based ... caused by the spraying?

And then you mention, I guess, following that, that you believe that these herbicides are hardly a safe or environmentally friendly alternative for vegetation control.

The ... I guess I'm going to leave Charles to comment, let's just say, on the questions of how they would apply pesticides, when are ... excuse me, herbicides ... when they might ... how often they'd have to do that and what are the sites they'd have to do that, but one point that I think that's important is that at least with the project that's proposed, they're, attempting to avoid using that approach wherever possible. As I understand it, we're talking about approximately 25% of the line might require herbicide spraying on an interim basis as opposed to 75% should be mechanically cleared and/or cleared by hand.

But the ... I think for the benefit of everyone here I might just summarize how herbicide use is controlled within the province, just so that everyone has an understanding of that, and I can do that pretty quickly.

First of all, any herbicide to be used in the province has to be registered by the Federal Government and that registration process requires that the product be tested for

health and environmental safety effects, and that determination is based on the scientific approach looking at the effects.

In this case, the proposal is looking at ... it mentions two herbicides that might be used, Tordon and Dycleer. And, of course, in the future there might ... in essence we're talking maybe every seven years. Possibly in those areas where they need to they might use herbicides, that they may use another product on another occasion and those would also have to be registered through the Federal Government and go through the same screening process for our protection.

From there, they would be just like anyone else who applies to use herbicides in this province. They would have to be ... the company has to be licensed with the province. Anyone who is going to be an applicator for that company has to be certified, and that implies a certain knowledge of how to use herbicides.

And from there, I know I'm not telling you anything you don't know but just so we're all on the same basis for this discussion on all these - ten questions I think - from there they would then apply to the Pesticides Advisory Board to receive a permit so they could apply the pesticides. And that application among other things, would also specify exactly where they would do the spraying and what product they intend to use. The Pesticides Advisory Board is made up of the government and different organizations that have responsibility or have varying responsibilities that apply to the effects ... I keep on saying pesticides, I'm sorry, herbicides ... it's a problem I have up here ... anyways, for the herbicides in the province, and those people would apply and if they did issue or decide to issue a permit, would then apply a number of conditions or would likely to be applying certain conditions to the permit. And among those conditions would include weather issues, for example, temperature indoor, wind and possibly also ... it looks like Wendy wants to correct me on something that I might have made a mistake on, but I'm almost concluded here and/or could be on an issue of buffers or setbacks around watercourses, around population centres, habitation or property lines.

And finally, there's compliance monitoring that NB Power's proposing to do when the application of spraying would occur, and apart from that our own department does compliance monitoring as well.

Wendy if I have made a mistake I'd like you to correct me right now.

WENDY SEXSMITH

Oh no, I wasn't here because you made a mistake. I am ready to address the question.

RICHARD LECOURS

Okay. Wendy Sexsmith is our representative for the Department of Environment for hazardous materials and pesticides, and herbicides in particular.

WENDY SEXSMITH

Yes. Just to make it clear. You were perfectly right when you said pesticides. A herbicide is a pesticide.

You raised a number of issues Mr. Doyle, and I just thought just for the sake of everybody I would back up a little bit. Richard mentioned that all products that are used in Canada and in New Brunswick must be registered under the Federal Government and right now, presently, the agency is Agriculture Canada. And it is a science-based process and, in fact, all the questions that you raised would be addressed through that process.

No products can be used in Canada at present unless they are considered to be acceptable from an environment and health safety perspective. And that, of course, would include things like biocumulation and all that sort of thing, so I'll just try and kind of go through some of the things that you raised.

Just to put things into perspective, you know, years ago and we still think of it I guess, DDT was registered as a pesticide. And in those days, we didn't know what we know now, and one of the major differences between pesticides that are registered now and pesticides that were registered then, were that DDT, for example, is a fat soluble product that is likely to build up in the food chain. In fact, it's one of the most likely ones to build up in the food chain and did, and that's why we don't have it anymore.

Almost all or all of pesticides that are registered today are essentially water soluble and that makes a really big difference because you've got products that are fat soluble, that tend to biocumulate or build up in the food chain. That is gone or almost all gone. Now the products that are used today commonly are not fat soluble, they are water soluble, and they don't tend to build up in the food chain. So that sort of starts things off.

The herbicides that have been used in the recent past by NB Power and may be used in the near future are essentially water soluble herbicides with a low toxicity. They do not contain the dioxin of concern, the 2-3-7-8 dioxin that was found in 2-4-5T, which is a phenoxy herbicide that everybody knows is Agent Orange, or a combination thereof, and that product is no longer available for use. It hasn't been used in the province on a commercial basis since about 1985, and certainly will not be used in any NB Power program in the future as far as I know, and certainly if I have anything to say about it. And I'm the Chairperson of the Pesticides Advisory Board and the Director of Pesticides control, so right now I do anyway.

The other question ... bio-degradation. Most products that are used today do bio-degrade. They vary depending on the types of products they are. Now I can't predict in the future what products are going to be used exactly, but the ones that are being used presently, the Tordon 101 is a mixture of Picloram and 2-4D. The Picloram part of the Tordon mixture is fairly persistent. It's used for that very reason. It will bio-degrade but it does stay around for a little longer than many other products.

It ... I guess some of the concerns are often things like leaching and that kind of thing. With Picloram it binds very tightly as many other products that are on the market today, they bind very tightly to organic matter. So commonly, Picloram is not seen much below 12 inches in a soil profile. So even though it does stick around for quite a long time, you know we're talking 1 to 3 years depending on the temperature, and the climate, and the soil conditions, and that kind of thing, it doesn't leach down very far so it isn't a danger to the goundwater per se.

Some of the concerns would of course be applying it too close to water sources and things like that. We address that in our permit guidelines and NB Power is addressing it also.

Let's see ... the other product Dycleer which I guess they're proposing for next year, is a mixture of 2-4D and Dicamba. Both of those products do not persist very long. They do break down in the environment through normal chemical and microbial processes so they're not likely to be in the environment for extended periods of time. So, bio-degradation now ...

Biocumulation was the other question and I addressed that a little bit in that because they are water soluble, they don't tend to biocumulate. And also, because they really don't exist for a very long period of time particularly the 2-4D and Dicamba, they're unlikely to biocumulate. And even upon ingestion, they are excreted, and so work that has been done looking at this sort of thing, very rarely, if ever, do residues for example of 2-4D show up in the flesh.

Effects on reproduction. Now the work that's been done with respect to the use of herbicides on or for vegetation management, essentially shows that as far as direct acute effects to animal populations, there aren't any. And I have to go back to the registration system for a minute because when a product is allowed to be registered, it's allowed to be registered for a specific use so if a product was going to be registered for the use on

rights-of-ways, the effect of the environment in a right-of-way situation would have to be ... would have to have been examined and considered acceptable. So because the toxicity is so low, animals can, in fact, eat these products although, you know, that's not something one would normally do, but it is certainly possible. And the products are excreted so there is no accumulation. The toxicity is low so there is no direct toxic effect.

The effect is that if you have a population of voles, for instance, that feed on particular seeds in that area that are produced by a particular plant that happens to be one of the plants that's sensitive to the herbicide that's being used, you are going to change the environment for that vole because his food source is no longer going to be there and this is well reported in the literature that, for some animals, there might ... they might have to go somewhere else for food or that population just might cease to exist.

For other animals, there may not be an effect because their particular food source, or shelter, or whatever it is that they depend on in the environment that has been effected by the herbicide, it may not have been affected. Therefore, their situation may not change.

So it's difficult to say yes or no. The answer is going to be yes in some situations and no in others and yes for a little while, yes for a longer while for some, and that sort of thing. That's the kind of answer I have to give you but certainly in some instances there will be an effect on population and distribution depending on the species. And in other situations there won't be. And in other situations, it can be enhanced. In fact in the midwest in the States, they use Tordon 101, Picloram and 2-4D to enhance range land, because they use it to get rid of unwanted woody species and enhance the growth of species that wildlife like. So, you know, it depends on one's perspective.

So the answer there is yes and no and maybe and sometimes, you know ...

And as far as reproduction goes, the answer again would be ... would go back to the registration system and essentially there don't appear to be any acute or long-term effects

that relate to the use of these herbicides on those animals. Those sorts of ... those bits of information are available and they are generated through the registration process.

What happens when a product wants or a company wants a product to be registered, they would go to Ag Canada and Ag Canada has a very specific protocol with all the specific types of information that they need ... acute, long-term, terraternicity, environmental impact, leaching, and all that sort of thing and in order for the product to be registered for this type of purpose, for instance, all that information that would be pertinent to this type of application, would have to be made available, and then scrutinized by scientists both in Ag Canada, Fisheries and Oceans, Environment, Health and Welfare, and Forestry if, in fact, it was a forestry product.

So there's quite a ... what's the word ... onerous science-based process at the very first level of pesticide use in Canada. I keep going back to that but I think it is an important point to make.

Let's see. I guess the other question you raised was the human aspect and again that goes back to the registration system. I mean these things would not be allowed to be used if they were going to be impacting on humans and as I said, because the product is water soluble, and because it does not biocumulate, if a moose or a deer or a rabbit does happen to graze in that area, the chances of the flesh having 2-4D or Picloram or Dicamba in it, are very, very small.

I'm not sure. Have I got all your questions here. I kind of scribbled them down here? Is that ...

MIKE DOYLE

But nevertheless, NB Power posts signs warning "Do not eat the berries", so they must suspect something that's not exactly right there.

WENDY SEXSMITH

Well, we do that, we ... not we, us, but through the regulatory process we make Natural Resources, for instance, who use herbicides in forestry, do that too, and that from our perspective it's essentially a way to let the public know that that is there, and then they can make a choice. And this came from years of getting phone calls and things like that and essentially people want to know, they have a right to know, and they should know. And if the signs there they can look at it, read it and then make their own conclusions.

With respect to power lines, if I were somebody who was concerned about berries on the power line, I guess I wouldn't pick a berry on a power line. That would be the first thing.

BRIAN NEWBOLD

Just a second. I think there was a comment.

RICHARD LECOURS

Well I just wanted to go back to ... since we've been talking about herbicides in quite a lot of detail, and I appreciate you having asked these questions because it's given me an opportunity to learn a lot more about it than I knew before I started. And thank you Wendy.

What I just wanted to say is that we're not ... with all this discussion, we're not encouraging pesticide use at all but I think that's what I'd like to send back to Charles to speak because how they would decide where they would use their herbicides is what you've essentially identified is where you would be concerned about, there actually being used and since that will be more the exception than the rule maybe Charles could speak on that.

CHARLES HICKMAN

I'll try and make this very quick. You must be getting tired standing there but I'll just give you a review how we use that in terms of some of the constraints we work under voluntarily as well as under the regulations and the acts.

First of all, we have (indistinct) an integrated vegetation control program for our transmission lines. We use three types of vegetation control ... one is mechanical clearing with a machine called a hydroaxe. We use hand clearing and we use spraying.

Generally speaking, hydroaxe is used on 50% of the transmission line in any one year. Hand clearing and spraying are used on 25% each. So in any one year, any line that gets any vegetation control will only ... there is only l/4 chance that it will be sprayed to start with.

In addition to that, the vegetation control program is done on a cycle based on basically the growth rate of some of the problem species to us. And that cycle means that we really only use any vegetation management approximately once every 5 to 7 years. So if you're looking at a typical line, and we're speaking in generalities here, not just this line, only every 5 to 7 years will a line get any vegetation control and only 25% of the time is a spray likely to be used.

The use of this spray will depend primarily on the actual nature of the ground that we're going over.

MIKE DOYLE

The type of vegetation ... that's what would determine the use of the herbicide would it? ... the type of vegetation and ...

CHARLES HICKMAN

The two things that primarily we use as criteria for the use of the spray or not to spray. For instance, the hydroaxe basically is a large piece of machinery that requires a fairly wide, at least a fairly level, flat piece of land to work over. Where you're going across either a rocky terrain, or a broken terrain, a hydroaxe is not suitable. So terrain is one function and species of plants that's a problem is the other function.

Now, even when we're spraying, and this is one of the reasons we are using relatively little of it and are trying to get away from the use of the sprays but, of course, Canada and the U.S., we recognize the concern about sprays even though on a scientific basis they may not be like a technical justification for concern, but all the utilities are trying to get away from the use of the sprays wherever possible. Ourselves included.

MIKE DOYLE

Well, we would certainly encourage that, yes.

BRIAN NEWBOLD

In your document I notice on Page 3, you know where it says that other methods exist which are more forgiving than chemical sprays. I'm interested to see what NB Power thinks about the idea contemporary infestation management techniques must minimize environmental impacts and preserve the ROW's, semi-wilderness and area, etc.

CHARLES HICKMAN

Well, one of the alternatives that I mentioned is there's hand clearing and mechanical. You see, you can't do mechanical clearing in some areas. It's physically not possible. The equipment is not designed for it.

Hand clearing ... one of the major constraints in hand clearing is just the amount you can clear by hand in any one year. In any one year there's a certain amount of

vegetation management that has to be conducted in the sense that in order to maintain the security and the safety of the lines, we have to clear a certain amount of vegetation every year.

Hand clearing is not as quick, is not as efficient as spraying, so that's where we get to some of the constraints.

As I say, we are trying to get away from the use of sprays if possible. We are trying to reduce them. Ontario Hydro, for instance is reducing its amount of spraying. I think it's down, I don't really know, considerably this year. They are trying, like ourselves, to get away from the use of spraying.

MIKE DOYLE

With your vegetation control, do you prefer a, you know, as I indicated, a prairie like appearance or has there ever been considered some sort of vegetation control program where you maintain some low-growing vegetation to provide wildlife habitats.

CHARLES HICKMAN

What we try to do is not ... we don't like prairies, and we don't feel that that is what is either required or necessary for the protection of the transmission line in terms of the security of the use. There are a number of species of plants that are compatible with a transmission line, the use and the maintenance of the transmission line. Where possible, we try and encourage the growth of those species.

Now, as pointed out by Wendy, in some parts of the world it's quite easy to use a spray to actually encourage the use of certain species.

Within this province just due to the, I guess the geography, the climate and so on there are a very limited number of species that are compatible that will grow willingly on a transmission but, for instance, we do try and encourage Christmas tree farming which we

definitely consider to be a compatible use. It's compatible because we know that they are going to be harvested before they get to a height that endangers our lines.

Likewise at stream crossings where we try and are committed to maintaining, for instance, an alder buffer. We recognize that those are compatible with the use of the transmission line ... the maintenance of the transmission line.

So yes, we recognize there quite definitely are species which are compatible. We do try and encourage them, and that has a distinct benefit for us. We don't have to go in and cut alders because we know they never grow into the transmission line. So if we can develop that species, or that combination of species that has like a limited height, it is a lot easier for us because we don't have to go in there as often. And it is one of the things that defines the cycle with which we have to go back to the line.

MIKE DOYLE

Okay, who determines whether you maintain something this height or just clear it? Who determines that? Just your ... I mean is there somebody that has authority over all the lines in the province or is it just up to certain regions or whatever, because the reason that I raise that question is just this summer, for example, a line just west of here, about 15 kilometres on Route 8, it was ... they used mechanical clearing but ... that's what they used. They cleared it, period. And, you know, there didn't seem to be any effort to maintain any vegetation there whatsoever.

CHARLES HICKMAN

The program that's developed is like a long-term management program. So in one year, yes, there may be mechanical clearing which takes it basically down to six inches above ground level or thereabouts. It's part of a longer term program.

So in any one year, you might see one activity which may not be the same as the next cycle five years down the road.

In terms of yes, we have an individual, we have a group of people who oversee the ... all the maintenance of all our transmission lines and they develop the program, the maintenance program, depending on the type of vegetation in the area.

I should clarify we don't clear 100% of every single line within the province. We have, in terms of spraying, a number of constraints. One is ... we alluded to some of them but, for instance, we do not spray in buffer zones close to streams. There's a setback. We do not spray in those areas.

In water ... in where in N.B. there's a well, or a private residence, or a where there's a water supply area, we maintain a set distance away from those areas. So we don't spray those areas.

We do not spray agricultural land.

We do not spray Christmas tree farming areas.

We do not spray in blueberry field areas, because we want to minimize the effect, minimize the concerns and just maintain an environmentally compatible transmission line and ...

MIKE DOYLE

Have you ever utilized biological control?

CHARLES HICKMAN

What do you mean by biological control?

MIKE DOYLE

Well, introducing a organism to attack another one so to speak.

CHARLES HICKMAN

I'll qualify this answer in that I'm not 100% certain. To the best of my knowledge, no we haven't. And if there is anybody else ...

(Voice in background, not at mike)

MIKE DOYLE

Alright. I'm under the impression though that BC Hydro has been using the biological approach.

(Voice in background responding).

MIKE DOYLE

I see. And has there been any ...

(Voice in background responding ... Wendy Sexsmith ... she spoke for a long time)

MIKE DOYLE

So in other words, it's not cost effective.

(Wendy Sexsmith responding).

MIKE DOYLE

So until ...

(Wendy Sexsmith responding)

BRIAN NEWBOLD

We'll have a pause for a coffee break. You've been standing we just realized for over an hour. You might like to sit down a bit and come back and we'll reconvene in 15 minutes okay.

BREAK/PAUSE

BRIAN NEWBOLD

Now might be a good time, you know, just to throw open the meeting, I think, to, you know, any people, for instance, who have been sitting there maybe trying to put, you know, one question in on any of the points that have been raised so far before we go on to others because there are other things. Are there any particular aspects that anyone would like to raise who didn't have an opportunity to do so yet on anything that has been discussed so far?

Is it something to do with what we've discussed?

REG FAULKNER

... matter and I'll wait until ...

BRIAN NEWBOLD

It was not raised earlier?

REG FAULKNER

It has not been raised yet.

MIKE DOYLE

No, no, Mr. Chairman. I'll gladly take a seat to allow somebody else ...

BRIAN NEWBOLD

Okay. It's a good move and we'll come back exactly where we stopped in awhile. Yes sir. Please go ahead. Your name please.

REG FAULKNER

My name is Reg Faulkner.

BRIAN NEWBOLD

And your affiliation is?

REG FAULKNER

Pardon?

BRIAN NEWBOLD

Your affiliation ... you know your ...

REG FAULKNER

You are going to be going across my ground.

You have two major hydros across my ground now. There is a major railroad across my ground. There's an unaccess highway going across my ground and possibly two unaccess highways going across my ground and you God Damn ain't putting this hydro across my ground. And that's a promise.

That's all I got to say. You ain't putting it across. I can guarantee it.

BRIAN NEWBOLD

Okay. That seems pretty clear.

Anybody else like to raise any particular ... sorry, yes go ahead.

Just identification please.

DON ADAMS

I'm Don Adams. I live in the area here. I'm an engineer by profession, and a good Rotarian and all that sort of thing. A good community man I hope.

But I was up to Mount Carleton in the fall and they were building a road there out to the Tobique and the devastation was terrible, you know. The streams were running just

full of muck and I asked the contractor, I said, "do you got to do that?" He said, "can you give me more money if I control all the sediment going into the Tobique?" I guess that was a tributary of the Upsalquitch, but it was getting into the Tobique.

And I was just wondering when you ... how contractors work with big equipment, bull dozers and that sort of thing, they're not going to respect the streams to get across.

I was just wondering if the Department of Fisheries and Oceans will be monitoring this all the time, or ... you know, unless you have somebody there, well contractors are contractors, and I guess you know the damage that does to fish life enhancement programs and this sort of thing, if just a little bit of sediment gets into the streams. And I was just wondering if you will have a Department of Fisheries and Oceans there or will they be monitoring the work all along?

BRIAN NEWBOLD

Okay, maybe the proponent and then ...

CHARLES HICKMAN

We will have somebody who is designated as a co-ordinator and one of his jobs is to keep an eye on contractors. So we will have our own internal person keeping an eye on major stream crossings and the like.

We, as a matter of course, will be avoiding having any machinery in any watercourse. We realize watercourses are important trout and salmon habitat and the document you have your hand on there outlines the mechanisms by which we will try and protect that habitat, and it includes keeping machinery out of the streams, maintaining a buffer zone along side of the streams.

Now, as to the, well Richard will speak to the Inspectors that other people may have, other agencies may have on site. But our principle is not to let any heavy machinery or any machinery at all into a stream if it is at all possible.

If we do require access to a stream in some form or another, for instance, to get across the Miramichi somebody has to go across the river to carry the initial (indistinct) line. Now we applied for a Watercourse Alternation permit from the provincial government and they tell us, essentially, how we can cross the stream. What time a year it is to be done at. What kind of equipment we can or cannot use. They will tell us essentially how we are allowed to cross that stream.

So we are very carefully regulated and our contractors have to abide by those same regulations and our contractors will have to abide by that yellow book, "The Environment Protection Plan", that is being developed.

And one of the prime reasons for that plan being developed, is to protect the fish habitat in this province because we realize it is a very important resource to yourself, to myself, to everybody who fishes, and is a natural resource in its own right.

I think Richard will raise some comments as to other people who will be watching the line, but ...

DON ADAMS

Is this information available before an area, because I'm just thinking it would be wonderful to have it before, to review it?

CHARLES HICKMAN

The document was made available essentially one month ago at a number of locations from both the Salisbury, Harcourt, Allardville, Newcastle, Bathurst, a number of locations around the province, as well as in Fredericton.

DON ADAMS

I just thought that it might help you in the other areas that you're going to if that information could get there before.

CHARLES HICKMAN

We recognize that it's a fairly technical document ...

DON ADAMS

It's wonderful what you've prepared there.

CHARLES HICKMAN

Well, I thank you for that comment.

BRIAN NEWBOLD

Well, just a comment from Mr. Lecours and then...

RICHARD LECOURS

Just a second. I don't want to take the breath away from you there.

You're asking specifically though what would the government be doing. In this case the responsibility for the watercourse crossings falls to the watercourse alteration group if you want, the Department of the Environment. And to issue a permit, when NB Power requests a permit from us, as Charles is pointing out, we would specify a number of conditions that might be applied to it, but as well, it would go DFO, the Department of Fisheries and Oceans would look at that and have an opportunity to make comments on that application.

As far as visiting the sites, I think in this case we are talking of over 100 watercourses involved with it. It's hard to pin a number because a half a meter wide stream can vary from any time depending on when you're looking at it, but ...

DON ADAMS

Those streams there are so important you know that runs into the ...

RICHARD LECOURS

There's no doubt about that and that's why we felt very strongly about that yellow document, the Environment Protection Plan, to give us an outline of how that was going to be dealt with.

But anyways, just in terms of who would be going to see it. It's unlikely that we would necessarily have someone going and inspect along that whole route but if we ever encountered a problem then that would be different. But considering the safeguards that are being in place, I would not expect that to be the case.

CHARLES HICKMAN

I'll just add one little add on to that because I know you receive a lot of attention from the regulators, but one other group that has people in the field who you would expect to see on the line would be the Department of Fisheries and Oceans fishery offices who, if you fish up on the salmon rivers, you've probably met on occasion yourself. But they certainly do visit our sites and do examine the activities that we're undertaking. So they'll be ... at various times I would expect to see them along the line during construction.

DON ADAMS

I was just wondering ...

BRIAN NEWBOLD

Oh please sir, the microphone. Your voice might be more effective if you would talk right into the microphone.

BRIAN NEWBOLD

Yes, I was going to ask you to make your other comment in front of the microphone please. Do you have another comment?

DON ADAMS

You mean me?

BRIAN NEWBOLD

Do you have another comment?

DON ADAMS

No, no thanks.

BRIAN NEWBOLD

Okay. Anyone else at this particular time on anything that was raised so far?

DON ADAMS

Well, just one question. Is it just options that you have on your right-of-way now or have you actually bought the property? Maybe that's not a fair question to ask.

DARRELL CLARK

No that's a very fair question. What we have done is we've taken options on much of the right-of-way. Some of those options have indeed expired because we were overly optimistic that we were going to get approval last fall, and we've got to go back and renegotiate some of those options. We have not at this point in time purchased any of our easements.

BRIAN NEWBOLD

Okay, let's proceed then with the rest of the brief, the 10 questions. We were up to Page 4 and the next aspect was the question of electromagnetic fields, EMF, and the

question was, "Is the proponent or others in New Brunswick currently conducting research on EMF to determine their potential consequences?"

CHARLES HICKMAN

The answer's very definitely yes. A lot of people are conducting research on EMF and the potential effects. New Brunswick power is not conducting research. We are not a research institution. However, we are following the research and the scientific literature. We are peripherally involved and have participated in some work that has been carried out where electromagnetic fields and particularly magnetic fields are being monitored along side lines and in people's homes. We have an individual here who can speak to the specific activity in a few moments, Mr. McCulley.

Yes, there is a lot of research going on. The reason for the research is because to date, there is no consensus as to whether or not there is or there's not, a risk associated with the lines or with electromagnetic fields in the home. And nobody knows at what level there may or may not be a risk. So there is a lot of research going on. They are trying to decide and find out if there's a risk ... if there is one or at what level it becomes a concern that they can actually regulate, if you like.

MIKE DOYLE

It's a very controversial issue really and, you know, we have, well the obvious concerns that I indicated and as far as we're concerned, they do exist. But, you know, we can ... there's many more people that will, you know, refute that and deny it so I guess that's why I asked that question is, you know. But if there's research, well I guess that's fine because hopefully we can get something concrete on this and allay a lot of our fears about these things.

CHARLES HICKMAN

If you're interested I know Mr. McCulley has been following the research and the studies, and he can probably give you a very quick summary of some of the activities that

are ongoing at the moment which are designed, hopefully, to get us an answer to what, if any, the effects are.

Joe, I don't know if you've got a moment there ... for a quick summary.

JOE MCCULLEY

Mr. Chairman, I'm Joe McCulley. I'm with the Health and Safety Division of NB Power. In response to your first question concerning EMF, is there ... are we currently conducting any research in this area to determine their potential consequences, and as Mr. Hickman pointed out, we are not a research institution but we do follow what the researchers are saying. And to date their results are inconclusive.

We do support some of this research through the Canadian Electrical Association which we are a member of and we do take part in projects, for instance, going out and measuring the field levels in people's homes, along transmission lines, in our facilities themselves. And to that extent, that is how we participate in the research.

Do you want me to deal with the other questions right now or did you have a comment on that?

MIKE DOYLE

As far as you're concerned at this point in time you're satisfied that EMF's are not a major health threat?

JOE MCCULLEY

Well, we just have to go on the basis of what the international bodies, the scientific bodies that do evaluate this information like the World Health Organization. If I may I'll refer to a list of the different bodies that have evaluated this: National Academy of Sciences; the American Institute of Biological Sciences; World Health Organization; the Office of Technological Assessment and so on, as well as our own Federal Department of

Health & Welfare, and I guess the bottom line to all that ... all their evaluations is there's nothing conclusive yet but they all support further research. And at the present there's approximately 150 projects going on in North America in this area right now.

MIKE DOYLE

Okay. Because I guess what prompted this whole thing was seeing all the results. There's been studies done to, that indicate these potential effects. You know, these tests or studies that have been done by competent people - doctors and epidemiologists and you name it, to the tune of millions of dollars and so I think something like this should receive top priority.

JOE MCCULLEY

Yes. There are some studies that show positive results and there's more studies that show negative results and the bottom ... the conclusion that any of these institutions arrive at is that there is no conclusion at this point. Like ...

(Voice in background, not at mike)

Well, there's three studies going on now. There's the medical studies, the engineering studies and the animal research studies and the projects are divided in those three areas.

(Voice in background)

That's one of the studies ... one of the types of studies. The other is human and the other is the engineering type where they evaluate where you are exposed to electromagnetic fields and how you are exposed to them.

MIKE DOYLE

Are you giving, well at least humans, the benefit of the doubt in trying to relocate away from residential areas and things like that.

CHARLES HICKMAN

Yes, quite definitely. At the moment we recognize that there is a great deal of concern and wherever possible as a matter of course, we try and avoid open areas when we're building transmission lines. You realize through obviously we have to get the power and electricity to the customer who lives in an open area, but one of the major constraints that was used throughout this route selection study, was open areas. We will try to avoid them.

To be very honest, we have our own reasons for wishing to avoid open areas, if at all possible and that is, for one thing, it's cheaper for us not to have to go through an open area and it's easier to find a route, whether or not houses and residences are close to the line, so yes, we ...

(Voice in background, not at mike)

CHARLES HICKMAN

This is one of the major concerns that we have is that at the moment, and Joe correct me if I make a mistake here, at the moment the scientific evidence that is available which show either the effects or no effects, does not indicate at what stage a magnetic field becomes a concern. If you go from a transmission line, away from a transmission line, the fields drop off very dramatically and very quickly. On the edge of a right-of-way, the fields are down at a relatively low level.

And the levels that you might find at the edge of the right-of-way, are not dissimilar to the ones that you might find in office environment or anywhere else where you are using electricity. For instance, in the kitchen. The same fields exist. The same source in terms of 60 hertz magnetic ... electric current.

The fields that are associated with some household appliances may be greater than exist associated with a transmission line.

So one of the major problems we have is that the scientific evidence doesn't show that at what stage we've got a problem, if we've got a problem at all. So from that point of view, nobody knows what is a safe location, or a safe distance, or a safe field. And that's one of the things that the fields ... that the studies that Joe has mentioned is trying to address. They are trying to get that information.

UNKNOWN

What voltages are you concerned with that you're talking about?

CHARLES HICKMAN

The voltages that are being examined are basically, well it comes from your household level so 110 volts right through to the major transmission lines which in this province run to 345,000 volts and in the States, on upwards of 700,000 volts, so it covers all the range of volts.

The fields are a function of the current and basically the greater the current the greater the fields, but they exist in your house, in your bathroom, your kitchen, your waterbed and they exist on transmission lines.

UNKNOWN

Did I understand you to say that you're more concerned with current than voltage?

DARRELL CLARK

If I can here, there are two types of fields that are produced on a line as with any electrical device. There's an electric field and a magnetic field. The electric field is directly proportional to the voltage so for a higher voltage line, the electric field would be higher.

The magnetic field is proportional to the current and as the current increases, so does the magnetic field.

Right now, it is the magnetic field which is receiving all of the attention in the research. It's the one that is under the scrutiny to see if there are any, you know, effects. The thing that you have to keep in mind is that the field strength does decrease very, very quickly as you move away from the source. So although our line may be a high voltage, it's the current, and the current is very high as well, but the conductors are also high in the air so a person standing in the right-of-way, or at the edge of the right-of-way on the ground, is a fair distance from that source.

When you compare it to other magnetic field sources in your home, you're very, very close to them. For example, if you sleep on a waterbed and it has a heater, you are only a few inches. If you sleep with an electric blanket, you are even closer to it. Although the field level that's produced is much lower, it's the fact that you're much closer to it that basically puts you into the same kind of a field strength.

BRIAN NEWBOLD

Just a second ... a comment. This is pertinent to what we're talking about now is it?

UNKNOWN

Very much.

BRIAN NEWBOLD

Please go ahead.

FRED METH

Fred Meth, New Brunswick Power. I just wanted to clarify one thing. I would not like to leave the conception with you that we avoid urban areas because of concern over EMF. We do not. We avoid urban areas for a variety of reasons and I think it's fortuitous that we avoid them, because that also avoids concern over this issue but we do not, at this point in time, consider this issue to be of a significant concern, a health risk, to the magnitude that would cause us to actually start avoiding urban areas.

We do try to minimize the amount of area that goes through urban centers and we try to avoid residences as much as we can but I don't want to leave you the impression that it's because of concern over EMF. It is not.

BRIAN NEWBOLD

What are the concerns then for the avoidance?

FRED METH

Well, I think they've been mentioned. A lot of people object to the ... to having a line, just the aesthetics of a line, going through a residential area.

Secondly, it's much easier for us to deal with large tracts of land in the hinterlands, really, in the rural settings, than it is to deal with a large number of very small properties when we're purchasing easements. And it's also much more valuable land to go through if you're going through urban areas so there are a number of compelling reasons for staying away from them. And I think it's a happy coincidence that that keeps us away from them, but it's not because of a predominant concern over EMF at this stage. We just ... we have to say that the jury is still very much out on that.

BRIAN NEWBOLD

So what it means really is the cost factor?

FRED METH

That's one of the factors, yes.

BRIAN NEWBOLD

Thank you.

MIKE DOYLE

Well, I guess that was my point yes was, you know, concerning the arguments that ... the pros and cons whatever about EMF, now thus far I guess your video monitor or clock radio or whatever, could have a greater impact on you than transmission lines but still, nevertheless, I'm respecting the fact that they may represent adverse effects on humans and animals whatever, I don't think we should, you know, expose people to these things on purpose. So I guess that was the main point. You know, try to avoid these here sensitive areas.

BRIAN NEWBOLD

Mr. Lecours would like to comment.

RICHARD LECOURS

Yes. I think I'd just like to summarize what I understand your point is and tell you essentially what's going to happen with that comment, with your health concerns. It's certainly a valid question to raise. It's been raised at each of the public meetings so far. I think in the discussion process we've managed to provide some perspective to the issue because there's different sources of information.

The review committee looked at that question and ultimately the recommended position is in the review statement but I think the reason we can at least make the statement that we don't expect a health risk associated with the transmission line should be in a sense of relative risk, is your comment, in that there are other sources as well in a day-to-day environment so looking at the kind of field levels that are involved with the transmission line, but that's where avoidance comes in and that's what was implemented in the first place in the line.

If they hadn't done that, then I think we would have had a much longer discussion on that whole issue, but since that's the characteristic of the way transmission lines are selected and that resolves that.

So what we'll do, is bring your concerns to the Minister and take it from there.

BRIAN NEWBOLD

Yes ... go ahead please.

FRED METH

Fred Meth again. If I may make just one further point to put this in perspective with this particular project. Just to give you an indication ... I'm not sure of the mileage of this project Charles. You probably know that.

CHARLES HICKMAN

241 plus or minus.

FRED METH

Okay. In that entire distance ...

CHARLES HICKMAN

Kilometres.

FRED METH

... there are 22 residences which are within a 100 kilometres of the ...

UNKNOWN

100 meters ...

FRED METH

... 100 meters.

CHARLES HICKMAN

Now that's avoidance.

FRED METH

I wanted to get a good plug in here but not that good.

BRIAN NEWBOLD

No, I was going to say, if that was the true situation I don't think we'd have many problems.

FRED METH

You'd wonder where we were building this. That's right.

But there are 22 houses, I believe, within 100 meters of the center line and I don't know what the closest one is.

JOE MCCULLEY

70 meters.

FRED METH

... 70 meters is the closest so that gives you some idea of the efforts we've taken to avoid residences.

JOE MCCULLEY

I wonder if I might add that we do have literature available on electromagnetic fields on the table over there for anybody that's interested.

BRIAN NEWBOLD

I was wondering ... this next question of yours then obviously, is related to the first one and, you know, it mentions what will happen to animals which do not avoid or frequent these areas. That's the areas which presumably will lead to exposure to EMF. Is there any information ...

MIKE DOYLE

I guess both are related. You know, in reality I guess as far as animals go, we don't really have any control over their utilizing the ROW's but I guess that's where your research would come in.

CHARLES HICKMAN

Certainly, the research that is being carried out at the moment, is being carried out, if you like, in a worst case scenario. The studies are focusing on primarily ... the human studies here are people who might be considered at maximum risk. So people, for instance, who use a electric arc welder on a regular basis. They've looked at those types of groups which are without a doubt some of the most exposed people to try and identify an effect and, if so, at what level.

I'm definitely extrapolating here and will go back to the biological/cellular level studies in a moment.

But by extrapolation, if an electric arc welder so to speak is not ... if you are unable to find an effect in an electric arc welder, the indication is that we won't be able to find an effect, for instance, in a deer who in as close as it's going to be is 12 or 15 meters to the conductor and on average, will be much further away from the right-of-way.

There have been studies at the cellular level, biological level, and they have shown an effect, magnetic electrical fields, do have an effect on some cellular activity. It has not been possible to, at the moment, begin to extrapolate that data to higher level in animals to be able to show a negative health effect. There are not effects. That is definitely known.

At the moment nobody feels that the effects, sorry ... the conclusions are not such that the effects are significantly of concern to somebody trying to keep animals a distance away from fields.

BRIAN NEWBOLD

Do you know as we say ... one thing I always think about in terms of fields is that if you travel on Route 20, for instance in Quebec, you know, the transmission lines go right over and on towards the Quebec Bridge and you find lots of times, dairy cattle, herds of dairy cattle, grazing directly underneath these power lines. These are all Hydro Quebec installations and you just wonder, you know, what would be the effects, for instance, on ....

MIKE DOYLE

Yes, not only wild animals ...

BRIAN NEWBOLD

These are directly underneath ...

MIKE DOYLE

... but agriculture as well.

BRIAN NEWBOLD

These are actually underneath the lines. You know, we're not talking about ... they're underneath them.

MIKE DOYLE

Yes. Well, I guess in some areas it's encouraged to pursue agricultural purposes on the lines, type of thing.

BRIAN NEWBOLD

What would you say to that?

RICHARD LECOURS

Well, I was just going to ... when you threw in that comment I was just going to mention the situation where they've looked at cattle in terms of studies because what you're

talking about is wildlife which generally would just be from a transitory point of view, would be passing near the power lines. And I think it's important to stress at least the epidemiological studies ... I'm not going to say that again ... that they have focused more in terms of where the transitory relationship is ... generally intends to be in the terms of the strengh of the field but also in relation to the length of the exposure and in the case of strong fields over a very prolonged period of time, we're talking years, and so in the case of wildlife that wouldn't be the case. And if it's difficult to even demonstrate there's a health affect over a period of years, then it's hard to associate necessarily that there might be in a year, of course, planning effect from a transitory point of view.

But specifically the cattle, for example in BC and elsewhere, they haven't done some, I think there are 3 cattle studies that I'm aware of, where they're looking at them where they are directly underneath a power line over a period time and they hadn't detected any specific health effects.

Generally what we're talking about for health effects has been an increased risk for leukaemia in children and/or brain tumours in adults in terms of the more pronounced effect but, again, that's not demonstrated and the rates are quite low in the cases where they do find an effect.

UNKNOWN

If I can just add one more comment. I think the ... to put it in perspective for the animals that may choose to, you know, walk under the line or even reside there on a full time basis, the type of field level that they are going to be exposed to from the line is not a whole lot different that what you and I are exposed to every day around all kinds of common electrical equipment - things at work and things in the home.

If I remember right, one of the highest readings that you can get in a home is from the burner of your electric stove. Is that right Joe? Sorry ... electric razor. Okay.

The thing is that many of these things are actually extremely higher than the fields on our lines. Now granted, an electric razor, the exposure is only a few minutes a day but I think, and I don't have the scientific data to back it up, but I suspect that the average person just from residual exposure in your day-to-day living because it is an electrical world, probably will exceed far more total exposure than the animals out there in the wilderness.

(Voice in background, not at mike).

CHARLES HICKMAN

It's correct that we are avoiding ... it's correct that we do avoid open areas, but it's not because we believe there's a concern related to electromagnetic fields. We avoid open areas for reasons quite apart from any perceived or otherwise health effects. Electromagnetic fields and the health effects are not one of the criteria we use in the route selection, but we do stay away from open areas wherever we possibly can.

BRIAN NEWBOLD

Okay, and the other question and the one that follows, as I said, is probably hypothetical.

Can we assume that these animals will eventually suffer the same consequences as those that are experienced by human beings? Presumably we don't know the consequences that are being experienced by human beings very well so does that mean we know even less about animals or maybe more about animals.

CHARLES HICKMAN

I wouldn't like to say whether it's more or less but I think it's probably fair to assume that whatever effects are found in humans, at some stage will be found in animals. But at the moment, no effects have been shown.

MIKE DOYLE

Okay.

BRIAN NEWBOLD

Anything else you would like to add?

MIKE DOYLE

No. I think that's quite sufficient Mr. Chairman. I don't believe it's customary for one presenter to occupy this much of a public hearing but I apologize to all the other participants for taking up so much of their time, but I do appreciate you addressing all these concerns.

CHARLES HICKMAN

I'd like to say thank you for raising them because they are issues that I know a lot of people have got, a lot of people do worry about and it's actually very nice to be able to explain the position and, hopefully, provide some answers that address some of those concerns.

MIKE DOYLE

Well, hopefully, we'll be looking forward, you know, especially to your research in certain things and whatever. You know, these concerns don't just stop here. You know, we'll be in touch again I'm sure.

Thank you.

BRIAN NEWBOLD

Thank you Mr. Doyle for your presentation.

Yes ... a comment.

FRED METH

Just to belabour the EMF issue to death. There's one point I think that's possibly worth making here. We've been talking about human health effects as is there have been demonstrated effects. In fact, there have not been demonstrated effects. There have been demonstrated associations and those associations are weak and questioned by part of the research community.

There have been some very clear demonstrated biological effects at the cellular level in some of the animal studies and some of the laboratory studies. Those have not yet been extrapolated to human beings and they certainly haven't been demonstrated as effects in human beings.

BRIAN NEWBOLD

One question here. In terms of other installations, you know, transmission lines, now lots of these exists, pretty well in every country. Now is this kinds of concerns raised here today, are they raised in generally, you know, elsewhere?

FRED METH

Yes, very clearly this has become an issue over the last, oh I would say the last fifteen years. There have been some of the early studies which drew attention to it were done in Russia and Spain and there's a very significant study underway right now, a combination of electrical workers who get sort of the maximum exposure in a work place from Ontario Hydro, Hydro Quebec and Electricité de France so there's a ... I don't know what the number of personnel involved in that study are but you have to ... to get that kind of a study you need very large numbers. Those kinds of studies are now being done and they're being done internationally.

BRIAN NEWBOLD

Thank you. Any other comments? ... on any aspect at all on the project.

BRIAN NEWBOLD

Faut pas que vous soyez gênés. N'hésitez pas à poser des questions si ça vous intéresse de le faire.

I was just going to say, don't be shy. This is the time too, more or less, now or never I guess, to raise whatever you'd like to talk about in this connection.

If I mention it three times, it's like, you know, an auction. I don't have a gavel but I realize we've been going two hours since the end of the opening presentations, including the coffee break obviously. So I think, if that's all, we can more or less terminate unless there's anything else you'd like to raise. Any of the panellists like to raise anything? No? Adequately covered?

Anyway, then it's just up to me to thank you for having come. The input, I think personally, has been very useful. I'm sure it will be very interesting for the people directly involved in the project and that's why these meetings are so important I think. People can express themselves freely and give an input which is valuable clearly, to all concerned.

Je vous remercie beaucoup. Bonsoir. Thanks a lot.

ANGELA BIRDSELL

...simultaneous translation this evening. There are some receivers that can be obtained at the back of the room. I invite you to get some if you need them.

On behalf of the Minister of the Environment, I would like to welcome you all here.

Mesdames et messieurs, bonsoir. Au nom du Ministre de l'Environnement je voudrais vous souhaiter la bienvenue.

My name is Angela Birdsell and I'll be chairing this meeting tonight. I live in Fredericton and I am not employed by the Department of the Environment nor by the proponent NB Power. My role this evening is simply to ensure an orderly meeting and to make sure that everyone who wishes to make a presentation, or ask questions, is given a chance to do so.

As you know, the Minister of the Environment has called this public meeting to discuss the EIA report prepared by NB Power on their proposal to construct a transmission line from Salisbury to Belledune.

I'm going to begin by introducing the individuals who are seated with me here this evening. On my right is the representative of the Department of the Environment, Mr. Richard Lecours, a planner in the EIA section, is the chairman of the Interdepartmental Review Committee, which is the group of technical experts who have reviewed the EIA study and prepared the General Review Statement.

On my left are representatives of NB Power who is the proponent in this case. Mr. Charles Hickman is Manager of Environmental Assessments and Mr. Darrell Clark is Project Manager for the transmission line.

Also in attendance this evening are some representatives from various agencies who reviewed the EIA study and produced the general review statement and they're here to answer any questions you might have which relate to their area of responsibility.

Avant de poursuivre, j'aimerais inviter tous ceux et celles qui désirent présenter un exposé officiel et qui n'ont pas déjà signé la feuille à l'entrée de le faire maintenant. Nous pourrons ainsi nous assurer que tous ceux et celles qui désirent intervenir auront l'occasion de le faire. Nous vous encourageons aussi à poser des questions et à formuler des commentaires, et ce n'est pas nécessaire de signer la formule. J'aimerais aussi mentionner que les services de traduction, comme j'ai dit, sont en arrière de la salle.

Before we go any further, I'd like to mention that any of those who wish to make a formal presentation and who have not already signed the sheet at the entrance, please to do so at this time and this will help ensure that everyone who wishes to speak will have an opportunity to do so. We also encourage informal comments and questions, but it's not necessary in that case to sign the sheet.

We're going to begin this evening with a couple of short presentations. Mr. Gordon, pardon me, Mr. Lecours of the Department of the Environment will provide us with a brief description of the province's EIA process. And next, Mr. Hickman of NB Power will tell us about the project they're proposing and details of the EIA report. And Mr. Lecours will be making a presentation on his own behalf as well as one on behalf of Mr. Gordon who is not with us tonight. And he will do his second presentation at the end.

So I'm going to begin with Mr. Lecours who will be making some statements for Mr. Gordon.

PRESENTATIONS WERE MADE AT THIS TIME BY REPRESENTATIVES FROM THE DEPARTMENT OF THE ENVIRONMENT AND THE PROPONENT NB POWER (SEE PAGES 4 - 16).

ANGELA BIRDSELL

Thank you Mr. Lecours. Our usual procedure is to have anyone with a brief or presentation to sign a sheet at the back and as of yet, we don't have any names, but I would like to encourage anybody who has prepared a presentation to approach the microphone, state your name and go ahead with your presentation. All comments, questions or presentations will be recorded on record and used in a presentation to the Minister. So at this time, does anybody have a brief or a presentation that they'd like to make?

If we have no written briefs, do we have any questions? Would anybody like to approach the microphone with a question? You're free to ask any one of our members up here to clarify something that they've said here in their talks. As well, we will be having a break, and at that time you may also want to speak with either some of the representatives in the audience one-on-one, or members of the panel. And again, you'll have a chance to voice your question on the record after that.

Are there any further comments? Okay, I think that maybe the best thing to do then in that case would be to take a break. I know we've just begun but there is coffee and refreshments at the back and all the representatives are here ... the maps are here ... the papers are there. You can look at them ...you can leaf through the reports ... talk to the representatives here and we will resume again so that if some points come up in your discussions that you want to raise publicly, then you'll have a chance to do that. Okay?

So we'll take a short break then.

BREAK/PAUSE

ANGELA BIRDSELL

Gentlemen. I think my audience is telling me it's time to start. You're certainly much livelier with a cup of coffee in your hand than ....

I'm really glad we took this break because it just ... I think it just shows that there is a great deal of interest in this project. There's a lot of discussion and I think that this meeting really serves two purposes, one of which is to provide you with information and many people asked questions during the break and I think that there was a lot of exchange of information, and I'm glad for that.

The second purpose of the meeting again I will stress, is that so some of your concerns, your comments, or even just points of clarification, questions that you have, are voiced on record for the Minister. As we said, the decision has not been made. It will be made after April 11, after all the letters have come in ... after all the comments have been heard and read. So what I'm going to do now is ask you if you had a discussion with somebody during the break ... had a question that was answered or a comment that was responded to, if you would like to either just stand at your place and raise the comment ... if you would just like to be heard in the room ...

If you would like your comment to go on record or your question, just come to the microphone and restate it even if it's something you have already asked and you're satisfied with the answer you have received, it wouldn't hurt to have that question to go on record for the Minister. So, could I ... I'll just open the floor. Don't worry about the microphone really. It doesn't bite.

UNKNOWN

Well, okay then.

ANGELA BIRDSELL

Okay, great.

UNKNOWN

I had a question about a magnetic field ... about what effect it has and what the effect would be on us, say, living halfway between this power line and the other power line.

ANGELA BIRDSELL

Okay. We've had questions on the magnetic field before and I'm going to ask Charles Hickman to respond to that.

CHARLES HICKMAN

I'll give a very brief response but we have somebody in the audience who has made it not quite his hobby but his job, I guess, to follow the discussions about magnetic fields and in just a moment I'll ask Joe to touch base on a number of the studies that are going on, on a number of the issues.

The situation very briefly is that we realize that there is a concern about electromagnetic fields, magnetic fields in particular. There are a number of studies ongoing trying to identify whether or not there's a health effect associated with magnetic fields. There's no consensus as to whether or not there is a health effect on either animals or humans. It doesn't matter about the age group. At the moment there is no consensus. They are still studying the issue and, hopefully, we'll soon have an answer as to whether or not there is a health effect.

I'm going to let Joe basically say any more than that because like I say, he's basically made it his specialty and he can answer the question and provide more information than I can. Joe.

JOE MCCULLEY

Excuse my back. I'm Joe McCulley. I work for the Health & Safety Department for NB Power and I do follow this issue quite carefully, and I have for a couple of years now.

First of all, there are literally hundreds of studies that have been done in this area throughout the world and there's hundreds going on right at this moment. Careful examination of these studies and all the research to date, not by me but by other scientific or by scientific bodies, have concluded that there is no basis for saying there's a health effect from electromagnetic fields.

All that aside, I go out quite frequently and measure the fields in people's homes and I can tell you that a magnetic field from one of these lines, you'd have to be right at the edge of the right-of-way to actually measure the magnetic field coming off of it. The closest home, and I don't even know if it's in this area or not, is 70 meters from the centre line which is not considered within the effects of the transmission line as far as magnetic fields go. In other words, you have to be right on the edge of the right-of-way ... 30 meters from the conductor ... 25 meters from the centre line I guess, in order to see a difference in measurements. Does that answer your question?

UNKNOWN

Very good. I had an answer before.

ANGELA BIRDSELL

I appreciate you bringing that up.

Do we have another comment from anyone?

We've heard comments throughout the room saying one of two things. One of them is that people are either a little nervous about approaching the microphone or also that some people feel that it doesn't really make any difference how you think, or how you feel, that the project is going to go ahead anyway. There has been some, in the presentation by Richard Lecours, some examples given where in environmental impact hearings there have

been negotiations, some concerns were raised and some changes made to the projects as a result of these hearings, so this is one of the reasons why we do have you putting your comments on record.

Any more comments?

SHEILA HANDRAHAN

This piece of paper that we have here that tells us the source of magnetic fields and I was asking questions about this to the gentleman who was at the microphone and he explained it to me, but I'm not too sure a lot of people might understand it. I'm not really sure if I understand it.

Like, okay, your electric shaver gives you between 50 and 69 hundred MG's, like magnetic fields. Like, how long do you have to use this shaver to get this? Like, you don't have a time limit here. It says "under the transmission line 100 magnetic fields ... beside transmission line 30 magnetic fields," and so according to this, just by looking at this like you're getting a lot more magnetic fields using your electric razor or your electric range or your refrigerator but like, how long do you have to be beside this stuff before you get anything off of it?

ANGELA BIRDSELL

Okay Joe.

JOE MCCULLEY

Okay. That is an instantaneous reading like the speedometer on your car or whatever. At that point in time you're going 100 kilometres per hour or whatever, and that is the measurement you get when that razor is being used. It's not something that's spread over a period of time.

So your point, I guess, your point is that you only use your razor for a couple of minutes and you're under the transmission line longer than that and that is a good point, but, you know, there are other things on here that you do. Like, the one I like to use is a water bed heater, because I sleep on a water bed. And the field given off by the heater, right where my head is every night, is 100 MG's and that's the maximum value that you see under one of our transmission lines.

And where my ... I didn't hear that.

SHEILA HANDRAHAN

You still only spend l/3 of your day in your water bed.

JOE MCCULLEY

That's right. Sometimes it's not even that much.

SHEILA HANDRAHAN

And the other two-thirds ... especially if you're a housewife say, a woman that doesn't go out to work and she's home all day with her family and little children who don't go to school, like they're spending most of their time in the home, and if they live near one of these transmission lines or under one, or beside one, they're getting this all the time.

JOE MCCULLEY

Okay. But the highest value that I've ever seen and I had to go up and down the transmission lines looking for this particular house, and they're as close as they can legally be to the transmission line, one that was fully loaded, and the 24 hour measurement, an average of something like 12,000 readings, was 7 MG's. Okay. Not the 30 that you see at the edge of the right-of-way.

In other words, every meter is crucial when you are measuring magnetic fields coming from that. So normally, houses are not as close as this particular one that I found,

in which case the fields in the house would be no different than the fields in a home that is away from a transmission line.

HEILA HANDRAHAN

Okay, but now we're going to be sandwiched between two hydro lines here. Is there going to be an effect there? We've got one on one side of us now and now they're building one on the other side of us now. What is this ... like what is going to be going through us?

JOE MCCULLEY

Okay. I don't know how far apart those lines are but I would expect that they are several hundred meters at least. Am I correct?

CHARLES HICKMAN

I think you must be referring to approximately 2 or 3 kilometres apart, and you are in between the two?

SHEILA HANDRAHAN

Right.

JOE MCCULLEY

Then that's two or three thousand meters and I'm saying that, you know, 10 meters can make all the difference in the world. It's just like a heat source, maybe a hot iron. The further you are away from it, the less that you can measure coming off of it. So, you know, if you're living between those two lines, you would see no effect at all. You wouldn't be able to measure anything from those lines.

SHEILA HANDRAHAN

So you'd be far enough away?

JOE MCCULLEY

That's right.

SHEILA HANDRAHAN

Okay then. What about the animals and that, that are in the hydro lines all the time? Like they're right there and we hunt them and we eat the meat. Like is this not ...

JOE MCCULLEY

No, no. There would be no effect there. They're having a hard enough job researching humans and the conclusion that they've reached for animals is that there is no effect at all on them.

SHEILA HANDRAHAN

Well was there not something out in the Western Provinces about the cows and stuff that were not able to reproduce and they thought it would be because of the magnetic fields?

JOE MCCULLEY

No, the conclusions of any of those studies again is that there is no effect on animals. In fact, out in Ontario the cows will graze underneath the lines.

SHEILA HANDRAHAN

What about a while ago we heard something in the news about schools in Ontario where the children were getting headaches and they couldn't concentrate on their work and stuff and they thought it was because the schools were close to hydro lines?

JOE MCCULLEY

Any of the reports that I have read have concluded that there is no effect. Like there are hundreds of studies going on right now trying to decide if there is any problems associated with EMF and ...

SHEILA HANDRAHAN

Well in these particular cases they haven't found out for sure but they don't know that it's from that or they can't know for sure it's not from magnetic fields, but they don't know yet.

JOE MCCULLEY

It's very hard to prove that something is not due to something. It's easier to prove if it is due to something but again, all the reports that I have read, I haven't seen any of the things that you've indicated. Okay?

SHEILA HANDRAHAN

Okay.

ANGELA BIRDSELL

Joe, I have a question. Your name Ma'am is?

SHEILA HANDRAHAN

Sheila Handrahan.

ANGELA BIRDSELL

Okay. If Mrs. Handrahan wanted to have somebody come to her house to measure the electromagnetic field, is that possible?

JOE MCCULLEY

Well, we don't normally advertise that we do that but I have been out occasionally. Most of it has been a project that we've done for the Canadian Electrical Association where I've gone out into people's homes and actually measured the fields. Some pretty surprising things, I might add. That's where a lot of these figures come from.

SHEILA HANDRAHAN

I'd forgotten while I'm here. You don't have a microwave oven on here. Is there anything coming from a microwave oven? Everybody has one now. It's not a luxury anymore. Actually it's a necessity.

JOE MCCULLEY

That's right. Microwaves are electrical and magnetic radiation. They're part of the electromagnetic spectrum but they're a different frequency than what we're looking at. We're looking at 60 cycle alternating current if you will, and that is much higher than radio waves and television waves. But a microwave will give off a component that is comparable to this and it can be as high as 2 or 300 right next to it.

SHEILA HANDRAHAN

Okay. What about the microwaves going into the food that cooks there?

JOE MCCULLEY

No, that's contained by the cabinet.

SHEILA HANDRAHAN

And television? You don't have television on here. Is there anything coming from television? We watch television a lot.

JOE MCCULLEY

Any electric appliance, anything that conducts electricity, will have a magnetic field associated with it. Even your grounding pipes, like if you're grounded to your water system, you can have a magnetic field coming off the copper pipe if there is a current flowing in it which there often is.

SHEILA HANDRAHAN

You don't have television on here ...

JOE MCCULLEY

No, no. This isn't meant to be an exhaustive list. Okay.

SHEILA HANDRAHAN

Oh, I see.

JOE MCCULLEY

It's just meant to be some typical examples that I thought you people might find interesting, but any appliance will give off electromagnetic fields. Or your home wiring, for that matter.

C. COAKLEY

Is there any danger to somebody that has like a heart pacer or a hearing aid, or something like that, walking underneath those hydro lines?

JOE MCCULLEY

Apparently there are some pace makers, the earlier versions, that there was problems associated with high electromagnetic fields and I don't know if they're even still around or not.

C. COAKLEY

What about where they have signs that say "microwave in use" and things like that?

JOE MCCULLEY

Yes. Some areas do and I presume it's for this but then again, the fields coming off a microwave oven are a lot higher than what come off our power lines. Any of the information that I have on pace makers is that there's no problems associated with the levels you would find under our power lines. That may be different if you're working on the line but in the normal walking under the line, on your thing here it's 100 MG's which is a pretty ....

C. COAKLEY

If you have something in there like a heart pacer or something like that, should you risk walking under the line?

JOE MCCULLEY

What I would suggest is that if someone has any concern at all that they contact their doctor and he would be able to tell them what model they have, and if there's problems associated with it. That's all I can say. I don't know a whole lot about the pace makers.

C. COAKLEY

Is the magnetic field that the main questions that are asked by people in all those meetings and that? Like their concern about the magnetic field and all that. Is that the main question that is asked everywhere?

JOE MCCULLEY

I think that it has been asked or been brought up in every meeting that was attended.

C. COAKLEY

Is that the main thing?

JOE MCCULLEY

I don't think it has been the main thing. There have been other issues, but it's been the most consistent. Everybody has a question about electromagnetic fields.

C. COAKLEY

From what I've seen here ... this is the only meeting that I've been to, and I see that most of the questions that have been asked here and if those are the questions that are asked everywhere else and like here concerns about the magnetic field between one hydro

and the other that's 3 kilometres away, somebody that's living, somebody that's near, should have a lot of concern about it eh?

JOE MCCULLEY

No. Seventy meters is not close as far as magnetic fields go.

C. COAKLEY

A lot of people are concerned about living one or two kilometres away from it. One that is living 70 kilometres has his house 70 kilometres away from it, has his kids playing outside and all that, should have a great concern about it.

JOE MCCULLEY

Not necessarily. I think where a lot of this concern is coming from is articles in the popular press, on TV, and whatnot, that tend to just report one side of this issue. And I think that's why we are getting a lot of questions about it because people don't really understand a lot about electromagnetic fields and they just want to know more. And that's what we are trying to do here tonight is provide you with some of the answers.

ANGELA BIRDSELL

There is, I will add, there is a booklet I think at the back - did you bring more copies - on some of the studies that have been done on electromagnetic fields. There's one in French and one in English and I think this is a federal government study. Is that right?

C. COAKLEY

Health and Welfare Canada.

ANGELA BIRDSELL

Health and Welfare Canada. So that's available for anyone who is interested.

Do we have some other comments? Sir?

C. COAKLEY

I would like to know how many hectares of land the New Brunswick Power Commission has cut for power lines on that never regenerated the forest again and why we can't have these cables underground? What has the government, what has the taxpayer lost on ground, when you take 10 or 12 acres to put your lines on it? Sure, you pay it the first time but forty years down the road you can't cut it again, so how much money are the taxpayers in this province losing?

CHARLES HICKMAN

Sir, right off the top of my head I don't know the exact number of hectares of lines that NB Power has. I think there's a figure in the Environmental Impact Assessment Report which I'll check in a moment. The way we develop the lines and gain easements for the lines, we do pay compensation which is ... factors in the renewable resource aspect of the land that is being used for the right-of-way. So, for instance, we would be paying a higher fee essentially for land that has got a high productive potential than we would be paying for land that has a low productive potential. And that's the function of the renewable resource of the land.

Like I say, I don't know the exact numbers. Well, I was looking quickly but I can't find it.

JEFF BARNES

1250 hectares for this particular line.

CHARLES HICKMAN

Our consultant tells me it's 1250 hectares for this particular line and I believe, it's about 5600 hectares in total for New Brunswick. I'll confirm that in a moment.

In terms of the possibility of burying the cable, I'll let Mr. Clark answer that. I think he can provide a very simple answer.

DARRELL CLARK

The answer is very simple. The buried cables are extremely expensive and if we were to bury all of the miles of transmission line that we have, the cost of the power to you as a consumer would go up significantly. I don't know just how much but I'm sure that you and I and everyone else in the room would be unlikely prepared to pay those costs.

C. COAKLEY

But the ground's lost ... you're not getting nothing off the ground, you're only getting it once. So you say it's expensive, it's expensive but if you've got all these hectares of land and in 150 years they don't give you nothing, there's 3 cuttings off it right there, so how much is your lumber worth?

CHARLES HICKMAN

One aspect that you've got to keep in mind is that when we take an easement it does not prevent agriculture and commercial activity, some commercial activities, on that line. For instance, Christmas tree farming is an activity that we are very willing to see on a transmission line. So the fact there's a right-of-way there, a transmission line there, does not mean to say it becomes unproductive land. Blueberry farms can still be developed on a transmission line, Christmas tree farms, normal agricultural activities, cattle, so it doesn't suddenly get taken out of the productive base of the province.

C. COAKLEY

One more question.

CHARLES HICKMAN

Certainly.

C. COAKLEY

What do you spray on your power lines?

CHARLES HICKMAN

(Tape starts here)... We spray two different herbicides which do contain 2-4D. One is called Tordon and one is called Dycleer.

C. COAKLEY

How powerful is 2-4D? The government banned it a few years ago. They couldn't use it.

CHARLES HICKMAN

If I could correct that just a little bit. The province of New Brunswick has licensed both those products with 2-4D in them for use in this province. That registration and that licensing is also carried out under the federal process where pesticides and herbicides are licensed. So it is being carefully reviewed at both the federal and the provincial level. This is a licensed product, one that is allowed to be used. The reason it's being licensed for use is because the scientific body that has reviewed the registration documents and reviewed the information concerning these products has found that there is no basis for banning them in this province or, indeed, in this country. So they are all licensed for use.

UNKNOWN

And how many total hectares in the province that the lines go on?

CHARLES HICKMAN

I'd say I think that it's 6,600 hectares. I'm still looking for the numbers.

UNKNOWN

(Indistinct)

CHARLES HICKMAN

No, I'm sorry. I can correct that right from the start. Although the lands that we have as right of ways, we carry out vegetation maintenance on a cycle. And a cycle is

counted up as every five years or every seven years, so between five and seven years, we will go into the transmission line and we will cut vegetation. (Indistinct) maintenance and vegetation control is carried out using a number of different methods. One is mechanical clearing. We have, basically, what we call a hydro axe. It's basically a very large lawn mower, if you like, that can clear a large percentage of the lines. And that is used on 50 percent of our lines. We also use hand clearing in areas where the hydro axe cannot get to because of the terrain constraints. And in that area I'd say that we clear approximately 25 percent of our lines by hand clearing, and only on 25 percent of vegetation programs do we use sprays.

C. COAKLEY

Why is that line being not hand cleared or mechanically cleared?

CHARLES HICKMAN

It's in function of a number of criteria, I guess. First of all, a hydro axe is a piece of machinery that can only be used on fairly flat terrain. So there are terrain constraints where we cannot use the hydro axe. Under some circumstances we use hand clearing because we will not spray, for instance, on Christmas tree farms, we will not spray in water shed supply areas, we will not spray close to residential areas, we will not spray close to streams and rivers and water bodies. So in those areas, we do not spray. We use hand clearing if we cannot use the hydro axe.

C. COAKLEY

So can this machine be used in swamp areas?

CHARLES HICKMAN

It will depend a little bit on the swamp. Usually swamp areas do not pose a major vegetation concern. There is very little high growth in a swamp to start with. So there would be very little vegetation maintenance in general...

SHEILA HANDRAHAN

I'm not talking about a pure swamp, but you know, there are a lot of areas that are boggy.

CHARLES HICKMAN

In boggy areas.

SHEILA HANDRAHAN

(Indistinct)... Around here that are boggy.

CHARLES HICKMAN

Yes. I don't know exactly what the extreme is... Yes, I don't know exactly how far they can go into a boggy area. And there are pieces of equipment that have been designed to a right of way and they certainly can be used in some soft areas with care.

SHEILA HANDRAHAN

So when you spray, you're spraying between five to seven years, every five to seven years?

CHARLES HICKMAN

That's correct. And on any one particular line it may not be sprayed every five years. The first year we may spray it, five years later we may use a hydro axe, and then only after that might we come back with a vegetation spray. So it may not even be every five to seven years. It may be only every ten years. And the actual...

SHEILA HANDRAHAN

Do you have a way of informing the public of the areas that you spray? I'm thinking of blueberry pickers.

CHARLES HICKMAN

When we spray--and this came up the other night at another meeting--we post signs on the transmission line where we're going to spray. And in fact, the province doesn't require us to do that, but we do post signs warning people where we're spraying, so that people have the choice.

SHEILA HANDRAHAN

(Indistinct)... Would they last for the season or whatever?

CHARLES HICKMAN

What happens is when the crew goes in to spray in the area, they post signs that same day or that same week that they go into an area. And that's, again, a function that we don't know how often we are going to be going in, so we post a sign every time we go into the area.

SHEILA HANDRAHAN

(Indistinct)

CHARLES HICKMAN

For the duration of the spraying, yes.

SHEILA HANDRAHAN

When sprayers leave (indistinct)...

CHARLES HICKMAN

I'm not quite certain. I believe... I'll have to check out the district office.

SHEILA HANDRAHAN

(Indistinct)... tell them to leave the sign there.

CHARLES HICKMAN

Certainly. That can certainly be done. There is no trouble with that.

DARRELL CLARK

John Kingston is our Construction Superintendent, shaking his head. I think, John, what you're saying is the sign stays after the crew has left?

JOHN KINGSTON

The sign stays there for a month or so afterwards, yes.

DARRELL CLARK

Okay.

JOHN KINGSTON

(Indistinct)

SHEILA HANDRAHAN

It should stay for a definite period, like a three-month period, or something to that effect, for the gatherers.

CHARLES HICKMAN

Okay. It certainly obviously stays there for a while. I don't know if it can be guaranteed it is going to be there for a certain period of time. One of the things you should be aware of is the sprays that we use are sprays that break down very quickly in the environment. So they basically will not be, if you like, on the berries and so on, for a long period of time. They are sprays that break down naturally in the environment. That's one of the reasons they are allowed to be used. It is because they do break down over time into harmless substances.

SHEILA HANDRAHAN

You were saying they were sprayed on berries and that, and a month after can you eat the berries?

CHARLES HICKMAN

What we do is the reason we put the signs up is to leave it to the general public to decide if they wish to eat those berries. We wish to make them aware of the fact that we've sprayed them. I'm not able to say whether or not they're safe, except to say that the pesticides are licensed because they are considered to be safe, and because there is no health effect associated with them. So from that point of view they are believed to be safe, yes.

C. COAKLEY

You know, 2-4D, it is a product of pulp, right? And the American Medical Journal has banned it and has said that it is a cancer cause in heart, lungs and liver. So, what relation (indistinct) and how much per acre are you spraying on your ground? And the government just passed a law to use 2-4D because it has banned it in America and it has banned it here. But you people, if the government passed it, and you're spraying it so it's a product of pulp and it's more stronger than Agent Orange... The American Medical Journal.

CHARLES HICKMAN

I don't know the study you are referring to sir, so I can't discuss it. Like I say, it's licensed for use in this province, based on a scientific review of the product, both by the federal scientists and at the provincial level.

C. COAKLEY

You're not familiar with the American Medical Journal, but it's banned.

CHARLES HICKMAN

I'm very sorry, I said I wasn't familiar with that article.

UNKNOWN

What about the animals that go in there right after you've sprayed that? They can't read any signs.

CHARLES HICKMAN

Again, the studies that are being carried out into the herbicides, Tordon and Dycleer that were used, have shown that there is no harmful effects on the higher animals such as deer and moose. And again, that's the reason they are being permitted to be used in the province, it's because there is no evidence that there's a harmful effect.

UNKNOWN

But what do you think about liver and that in moose and deer, if you can eat it that, would it have an effect on that?

CHARLES HICKMAN

No, there was a lady who was speaking on behalf of the province last night who explained that there would be no effects on any humans who were eating deer or venison that had been grazing along a transmission line that has been sprayed. She said that there would be no effect.

UNKNOWN

No effect on deer? Then why do they put signs right after they sprayed for people?

CHARLES HICKMAN

We put signs there so that you can have the choice as to whether you wish to go in. We are allowed it because there is no health effects on scientific basis, there is no health effects. We still like to allow the public the choice as to whether they wish to go in there or not to harvest that material.

SHEILA HANDRAHAN

Did you eat the berries after they were just sprayed?

CHARLES HICKMAN

I have done so, yes.

ANGELA BIRDSELL

Mr. Meth, would you like to make a comment?

FRED METH

Yes. My name is Fred Meth. I'm Director of Environmental Affairs with New Brunswick Power. I would like to refer the gentleman to Page 746 in the Environmental Impact Assessment where the details of these particular sprays are presented, and the positions of the American and Canadian governments about the legitimacy of using those sprays are discussed. And I want to assure you categorically that N.B. Power is not in the business of using sprays that are banned by the government of Canada or the government of New Brunswick. There is just no question of that. If that's the law, we're not going to be breaking it.

C. COAKLEY

It was banned, you see.

FRED METH

I'm sorry, but I can't agree with that. The particular ones that we are using have not been banned.

C. COAKLEY

(Indistinct)

ANGELA BIRDSELL

Excuse me... Would you like to go ahead, madame?

SHEILA HANDRAHAN

Are these chemicals used in agriculture in any place else in Canada, 2-4D?

FRED METH

Yes, they are. They are common.

SHEILA HANDRAHAN

I raised the question and I don't really want to alarm people about it, but I think some people are sensitive to chemicals, and some aren't, and I think they should know if they're being used.

FRED METH

Well, I think that's the rationale behind the signage that we use, is to give people that choice.

ANGELA BIRDSELL

Sir, your comment?

C. COAKLEY

Yes. I have a friend who is a professor at the University of Harvard in Law. And he, through the American Medical Journal wanted to have a study of Queens, Kings and Kent counties. The highest rate of cancer in the dominion of Kent, and he would have had a grant of $275,000.00 dollars to do this study, but the Canadian Medical Journal would not publish it.

FRED METH

Well, I'm sure that he would have been able to find another journal in which to publish it if the Canadian Journal didn't publish it, then there are many medical journals available, but I'm not aware of the study that was done or I can't really comment on that at all, sir. All I can comment on is the fact that the two sprays that we have identified as being the sprays that we used in this province are legal.

C. COAKLEY

I have some samples in the back that I will bring to you because when they sprayed the hydro last year, I personally took them. I took them from Irving and they spray (indistinct) tree. And I think it would be very interesting (indistinct).

ANGELA BIRDSELL

Sir, if I could make a comment. I think it sounds to me that you have a legitimate concern that should be voiced to the provincial department that has allowed the use of these sprays, used your article as support. But I think that if they are sprays that have been okayed by the federal and provincial governments, then it's in a way a different issue. But I think that it is something you should express in a letter, perhaps to the Department of the Environment.

RICHARD LECOURS

Yes, Charles alluded to our meeting last night that we had, where we had a discussion on pesticide use or herbicide use, and we had a representative from our Department who deals specifically with pesticide applications. Any use of pesticides in the province here has to go through what is the Pesticides Advisory Board, and that's made up of representatives from a number of different departments, including the Department of Health, and Natural Resources, and ourselves, and a number of other groups--Occupational Health as well, because there is people who have to apply those products and you want to do that safely, as well.

And there's a whole process involved there. If you have information that you feel changes the aspect of those products being used, again as the Chairperson said, it's in relation to this particular project the whole idea is that from a scientific basis then the testing has been done. There's a number of, there's a whole specific process to make sure that health and environmental safety is respected, and that's an established accepted procedure on the federal and provincial level. I can't really give you any assurances beyond that. If you had concerns, I think the person that we had here, Wendy Sexsmith of our Department, is extremely knowledgeable in terms of what testings are actually done and the studies that they do. And some questions were, for example, on the idea of eating the meat and so forth from animals that might graze there, and where she could explain from a technical point of view, how those products do or don't pass through the body or how they may not even be present. So, it certainly was very convincing in the sense that knowing that in these specific instances that isn't where we should be concerned about it.

And I think what you should do is maybe speak directly with that person and see if you feel that there are still some points that aren't address by the studies that they've done, that you still feel uncomfortable with. And then you could take that to the Minister or to the Pesticides Advisory Board who would have to respond to that ultimately. So, if you certainly have--I can see that you certainly have a real concern, and there is a process there for pesticides to follow, and I welcome you to do so. And I'll give you her number and how to contact her for that.

C. COAKLEY

Let me ask thais gentleman one question. What percentage when the 2-4D is sprayed that (indistinct) to another? What percentage does it gain as it goes from, we'll say, a bird picks it up and then it goes into the water and fish? What percentage does 2-4D gain, does it go up and does it go down?

CHARLES HICKMAN

If I can just briefly review in passage what was talked to us last night by the deer area representative. She explained that the products are both water soluble, which mean they pass through the body, they are not accumulated in the body, and she emphasized one of the reasons again that they were waiting to license them is because these products do not bio-accumulate, they do not increase in concentration between the birds going up in the food chain. The point that she made was that they do not bio-accumulate, and that's one of the reasons they considered it safe to use.

C. COAKLEY

I believe it's four percent it increases with the stuff that I have. Each time when it is dropped.

RICHARD LECOURS

I don't--from what you are saying we can't generalize for this specific chemical, because it depends on, there is some 2-4D that is present in Dycleer or in Tordon, but it's the actual formulations and, as Charles was saying, previously I guess where everyone has become more knowledgeable about that as being an issue way back when it was DDT which was a fat soluble product and that did bio-accumulate. And I can't compare to the number you're giving, but the whole point is that if it is a water soluble product it just passes right through the body.

So, and as well, I guess what was important in terms of her presentation was just the idea of how do you actually get exposure to it. The product goes into the soil and it's no longer, its effect is in the ground for those particular products. They all are different and you can't compare one to the other and you have to take a specific example, and that's where I think you would benefit from speaking directly with Ms. Sexsmith, because right now I guess we don't have anyone here who can really clarify any of those issues. But there

is a whole technical review process and people who are experts on those subjects. And they're always available to talk directly with you to eliminate--not to eliminate your concerns, but at least to give you a general idea of what actually is done.

UNKNOWN

Are these chemicals, like 2-4D, mixed with another agent like fenitrothion is for the budworm spraying (indistinct)?

CHARLES HICKMAN

I believe it's correct that the actual active chemical is mixed with a carrier solution. I don't know what the carrier solution is. But again, it's approved for use.

UNKNOWN

Is it a petroleum product?

CHARLES HICKMAN

No, I don't believe it's a petroleum product, but I would have to check and get the information on that. I don't what the carrier product is, but it is usually mixed with some carrier.

UNKNOWN

What you said, there was 50 percent done by machinery (indistinct) and 25 percent done by hand, and the other 25 percent done by spraying and that, and the spraying would (indistinct) by the rivers or the brooks (indistinct), but wouldn't it be possible for that 25 percent still to be done by hand or by machine?

CHARLES HICKMAN

In some circumstances, yes it would be possible, and we are trying to... just a moment...

UNKNOWN

(Indistinct)... would still be able to be done by hand or by machine. There are so many people who have no jobs and that.

CHARLES HICKMAN

We are trying to reduce the amount of sprays that we use, but we realize that there is a concern. Whether or not it's got a scientific basis is less certain, but we are aware of the concern, we are trying to reduce that use. One of the reasons that we have to spray is because in order to maintain the vegetation at a safe level on all our transmission lines, there's a certain amount of clearing that has to be done every year. Spraying is a far more efficient and cost-effective fashion of doing that vegetation control. And there's a concern that with hand clearing and mechanical--or I'll say with hand clearing where we cannot use the mechanical equipment, there's a concern that we would not be able to maintain the vegetation at a safe level for the use of that transmission line. So there's a...

UNKNOWN

Why not hire more people and get more machines?

CHARLES HICKMAN

There's a cost factor involved, sir.

UNKNOWN

Well, I don't think people would mind paying a dollar or two more on their bills if it would give 1,000 jobs more.

CHARLES HICKMAN

I can't really answer for everybody, but I know there's a cost factor, and there's an efficiency factor in spraying.

UNKNOWN

Why is it worth the risk of the wildlife or the people, if you can (indistinct) otherwise?

CHARLES HICKMAN

Based on the review that has been carried out of these materials that we use, of these chemicals that we use, our understanding is that there is no risk associated with the use of these chemicals. Therefore, it does not follow that there is a reduced risk by not using them.

UNKNOWN

Why risk it if you could do it otherwise?

CHARLES HICKMAN

As I indicate, there is no other risk associated with these chemicals. That's why we use them.

UNKNOWN

But a lot of people are concerned.

CHARLES HICKMAN

Yes, there is a concern.

UNKNOWN

(Indistinct) most of the people and not use them at all?

CHARLES HICKMAN

I do agree there is a concern...

UNKNOWN

(Indistinct) would be a lot more satisfied if you would not use them at all.

ANGELA BIRDSELL

It seems to me that this is a concern of yours and you feel that for that 25 percent that is sprayed that N.B. Power should explore the possibility of doing that by hand, is that not right?

UNKNOWN

By hand or by machine. And I don't think it's only my (indistinct).

ANGELA BIRDSELL

That's fine. The reason I'm saying this is that I want this to go on record as being a concern of yours, so that we can, the Minister will hear this. Would you like to respond to this?

RICHARD LECOURS

Well, you just said it, that's fine. Essentially, we can take your comments from that point of view. You definitely have a concern and there is other people here who have raised the same concern. And so, and you've offered a suggestion and that suggestion can be taken into consideration, and we'll see how that, and that will be taken to the Minister.

ANGELA BIRDSELL

Do we have other comments?... Any more questions?... Okay, again I will also--you may not have heard that the Minister will also be accepting letters. If you go home and there is something that you wish you had brought up and hadn't, you're free to write a letter to the Department of Environment letting them know. If you have questions about pesticides, Mr. Lecours has a name of somebody who is very qualified to answer your questions in that area, as well, in the Department of Environment. Feel free to come

forward, get some addresses from us, from the members here, for some names and phone numbers. And if there are... excuse me... Yes?

CHARLENE GAUDET-SLEEP

(Away from a microphone) I have a comment I'd like to make. I also work for the Department of the Environment and the group that these people talked about, the Pesticides Advisory Board that deals with the technical aspect and advises the Minister on the permitting process. Our meeting next week, they're holding a public meeting in Sackville. They have one annual meeting per year and they move around. So this year it will be in Sackville next Wednesday, the 3rd of April. So people are welcome to come out to that meeting to find out exactly how pesticides are registered in the Department. And if you want any more information on our meetings, just see me in the front.

C. COAKLEY

One more thing. I talked to the Honourable Vaughn Blaney on an open-line show last April. And I brought the spraying to the Harcourt area and he wasn't familiar that they were spraying (indistinct).

CHARLENE GAUDET-SLEEP

(Away from microphone) Well, I can't answer that question.

UNKNOWN

(Indistinct)

ANGELA BIRDSELL

Does this have to do with Natural Resources... (indistinct)... Okay. If there are no further questions or comments, I will call this meeting to a close and thank you all very, very much for coming out. We really do hope that you will follow-up with a letter or questions, if you feel the need to do so. So thank you again and I wish you all good night.

BRIAN NEWBOLD

My name is Brian Newbold and I'll be chairing tonight's meeting. I live in Moncton, but I am not employed by the Department of the Environment or N.B. Power. My role this evening is to ensure an orderly meeting, and to make sure that everyone who wishes to make a presentation or ask questions is given the opportunity to speak. As you know, the Minister of the Environment has called this meeting to discuss the E.I.A. report prepared by N.B. Power on their proposal to construct a transmission line from Salisbury to Belledune.

I'd like to begin by introducing the individuals who are seated with me this evening. On my far right are representatives of the Department of the Environment. Mr. Richard Lecours, is a Planner in the E.I.A. Section, is the Chairman of the Interdepartmental Review Committee, which is the group of technical experts who have reviewed the E.I.A. study and prepared the General Review Statement. On my immediate right, is Mrs. Nancy White, who is also a planner in the E.I.A. Section.

On my left are representatives of N.B. Power, which is the proponent in this case. Mr. Charles Hickman is Manager of Environmental Assessments, and Mr. Darrell Clark is Project Manager of the transmission line. Also in attendance are some representatives from the various agencies that reviewed the E.I.A. study and produced the General Review Statement. They are here to answer any questions you may have which relate to their area of responsibility.

Before we go any further, I would like to mention that those who wish to make a formal presentation and have not already signed the sheet at the entrance, should do so at this time. This will help ensure that everyone who wishes to speak will have an opportunity to do so. We also encourage informal comments and questions, but it is not necessary to

sign the sheet for that. I would also like to note that simultaneous interpretation is being provided, so if you would like to pick up a translation device, you can do so at this time as well.

J'aimerais mentionner aussi que les services de traduction simultanée sont assurés. Alors si vous voulez vous procurer un récepteur, vous pouvez le faire maintenant aussi.

We would like to begin this evening with a couple of short presentations. Mrs. White of the Department of the Environment will provide us with a brief description of the province's E.I.A. process. Next, Mr. Hickman of N.B. Power will tell us about the project they are proposing and give details on the E.I.A. report. Finally, Mr. Lecours will speak on the role of the Interdepartmental Review Committee in this process, as well as briefly summarize the General Review Statement prepared by his committee. Mrs. White...

PRESENTATIONS WERE MADE AT THIS TIME BY REPRESENTATIVES FROM THE DEPARTMENT OF THE ENVIRONMENT AND THE PROPONENT NB POWER (SEE PAGES 4 - 16).

BRIAN NEWBOLD

Merci, Monsieur Lecours. Thank you very much lady and gentlemen. Before we begin hearing briefs, I'd like to note that everyone is welcome to participate in these proceedings. It's not necessary to make a formal presentation. All you need to do is approach the microphone. To assist the translators, I'd ask that you please speak slowly.

Il n'est pas nécessaire de présenter un exposé officiel. Vous n'avez qu'à vous présenter au micro. Pour aider les interprètes, je vous demanderais de parler lentement.

These proceedings are being tape-recorded so that we may prepare transcripts and a summary of public consultation for presentation to the Minister. If you'd like a copy of

the summary report, please sign the sheet which is located over on the side table. I'd ask you that you identify yourselves as you approach the microphone.

Les discussions sont enregistrées afin que nous puissions préparer un compte-rendu et un résumé de la consultation publique pour les présenter au ministre. Ces documents seront disponibles si vous signez la feuille qui se trouve sur la table à côté. Je vous prie de vous identifier en vous approchant du micro.

Thank you very much. Merci beaucoup. Our first presenter is Richard Debow. Mr. Debow...

RICHARD DEBOW

Mr. Chairman, my name is Richard Debow and I'm speaking to you tonight as a citizen of Moncton. I am associated with the New Brunswick Wildlife Association, the Moncton Fish and Game Association and the New Brunswick Environmental Council, but the comments that I have tonight have not been put forward to those organizations, so I'm speaking on my own behalf and not on their behalf. Although I know that a lot of the comments that I will have for you would receive the approval of those organizations.

As a long-time wildlife and conservationist, I am concerned for the wildlife of our province and wildlife habitat, and the consequences that this transmission line would have on them. In particular, I'm concerned about deer wintering areas, watercourses and wetlands. The question that first comes to mind is what will be so different about this power line after an E.I.A. study and report? We still have a 241-kilometre corridor 50 metres--or is it 90 metres--wide, going through wildlife habitat with the consequential loss of that habitat. This is as it was with earlier power lines. What we do have is a draft Environmental Protection Plan which recognizes the sensitivity of wildlife habitat, and in particular, buffer zones along streams, deer wintering areas and other environmentally sensitive areas.

This Environmental Protection Plan is a good start and appears to be comprehensive and a step in the right direction. However, I would urge that the plan be accepted beyond the draft stage, and be adopted as policy of N.B. Power. Perhaps the status of this plan and N.B. Power's intentions for it could be confirmed by them at this meeting.

I've got a few questions, so you can address them now as we go along.

CHARLES HICKMAN

Okay, if you'd like, I can address them now very quickly. The reason that the Protection Plan is a draft is because it is being reviewed both by the provincial Department of Natural Resources, the Department of Environment, the Department of Tourism, Recreation and Heritage, also by federal departments such as Fisheries and Oceans and Environment Canada. That's not a complete list; they are the ones that just come to mind. We have prepared the document in a draft form. We have sent it out for distribution, for comment and review by those agencies. We've also made it available to the public through this forum and others, so that we can seek input, so the document is the best possible document that incorporate the best possible engineering and construction practices. It is definitively a policy of N.B. Power that we will abide by all commitments made in that document. We will be following everything that is in that document, including the provision of an individual (unclear on tape) and should oversee the implementation of the document, an environmental co-ordinator who will oversee all activities of construction on transmission lines. So you can rest assured it is quite definitively a N.B. Power policy to follow the details of that document.

RICHARD DEBOW

My next question is for the Department of the Environment. Will that plan--is that plan being accepted as a recommended condition for this project?

RICHARD LECOURS

Well, the Review Committee itself, as I mentioned, were requesting that it be adopted as specifically as the conditions prior to construction of the line. And I imagine that it would be up to the Minister to decide on his own recommendations.

RICHARD DEBOW

I am particularly heartened by N.B. Power's handling of the buffer zones along streams, and in particular the restrictions of:

1) only allowing hand clearing;
2) the reduction of the right-of-way width to 3 metres within the buffer zone;
3) only clearing danger trees within the buffer zone;
4) the falling of trees away from watercourses.

It is particularly important that N.B. Power has recognized the buffer zones and recommended on Page 27 of the report that "buffer zones should be 15 metres wide where the slope is 0 to 5 percent, 30 metres wide where the slope is 6 to 10 percent, and 60 metres wide on slopes greater than 10 percent". And that brings me to my next question: How did you arrive at those distances?

CHARLES HICKMAN

That is very easy. The Department of Fisheries and Oceans has prepared a document which is "Resource Road Construction", guidelines for the construction of roads and basically for the maintenance and the development of buffer zones. They have developed those figures for different streams and they feel them to be, I guess, appropriate. Now, we've taken those numbers, those distances out of their documentation.

RICHARD DEBOW

I note, however, that at Page 12, Paragraph 3.3, and Page 22, Paragraph 4.12, that there are references to a minimum 10 metre erosion control zone between the edge of the right of way and any watercourse which it parallels. This is unacceptable, and less than the

buffer zone width recommended along the stream courses. The erosion control zone width should be the same as the buffer zone width, depending on the various slopes. With respect to deer wintering areas, the Department of Natural Resources and Energy advises us that there are 886 deer yards in the province of New Brunswick, encompassing approximately 200,000 hectares. With so few deer wintering areas in New Brunswick, it is essential that we perpetuate deer wintering yards over time. Deer wintering areas are elastic and do change over time, however, we cannot afford to have this power line run through three of our deer wintering areas. Three out of 886 deer wintering areas is one-third of one percent of our total deer yards. I realize that the proposed power line takes only 1.57 percent, 1.43 percent and 2.56 percent respectively out of the three deer wintering areas, however it is my view that the right of way should be re-routed around the three deer wintering areas. I understand that an attempt was made to avoid the two deer wintering areas in the North, however, it turned out that the two areas were either not where the Department of Natural Resources and Energy had mapped them, or the yards had moved somewhat over time. Do you know which of that it was?

CHARLES HICKMAN

I believe the yards have moved over time. I don't know if there is anybody from Natural Resources who can confirm that. A consultant I can see is flicking quickly through his report, trying to remember which one it was. We can't confirm it. I'm fairly sure that at least one of them had moved over time, because the original route was selected to avoid it. And it turned out, I believe it's not the Monteagle deer wintering areas, the next one north that had moved a little over time.

BRIAN NEWBOLD

We'll here from...

JEFF BARNES

Hello. My name is Jeff Barnes from WMS Associates. The Monteagle Road deer wintering yard is on private land and it has been there, and it's an historic deer wintering

yard, and so it hasn't moved as such. Excuse me... The one on the Kouchibouguac River was originally identified to as by Rod Currie, and their map data shows that it has a series of discreet stands, and I believe it has, in fact, moved as it were against the earlier data we had which had been collected in the early 70's. So we've missed that in the route selection study, because we're using existing information. The one in the north is the one, in fact, which has recently shifted as well to the west, and onto the line we originally routed to avoid it. So... okay.

BRIAN NEWBOLD

Okay. Thank you. Go ahead.

CHARLES HICKMAN

If I can just add as a small point about the most northern deer wintering area. That line won't be built to that portion of the line between Bathurst and Belledune. It won't be built until 1997 at the very earliest, and possibly not until several years after. At that time, I suspect that the deer wintering area may have moved again, so...

RICHARD DEBOW

Was there any alternative to going through the Monteagle deer yard?

CHARLES HICKMAN

The route selection study that was carried by our consultant basically identified all the various constraints in the area. I'm afraid to say that there is really no other way of getting through that area. I'd like to point out the actual percentage of the deer yard is very small and hopefully there will be no adverse impact as a result of the line.

RICHARD DEBOW

I recognize that there is elasticity in changes in deer yards over time, but it is essential that deer wintering habitat be secured in the general traditional areas. The report itself indicates that there is a five percent turnover of deer wintering areas due to forestry

practices. This is unacceptable without mitigation. I also note that there are 69 deer wintering areas in the corridor considered for the transmission line. I would like to know how many deer wintering areas are within one kilometre of the proposed right of way, and what measures will be taken to secure travel routes to those adjacent deer wintering areas for the deer?

CHARLES HICKMAN

I'm afraid I cannot answer the first question as to how many deer wintering areas there are within one kilometre. Based on the map that Natural Resources have, we can't gather that information. In terms of the access routes to get to the line, the majority of the time--I can't say every time, but the majority of the time we use existing roads.

RICHARD DEBOW

Now I'm talking about the travel routes for the deer to get, you know, from one side of the line to the deer wintering area on the other side of the line. Are you maintaining travel routes? I'd suggest that you do so, anyway.

CHARLES HICKMAN

Okay. At the moment it is not intended to maintain specific travel routes across the transmission line. However, as you point out, the buffer zones along streams are, again, a popular travel route for mammals in general. We'll provide a travel route across the transmission line.

RICHARD DEBOW

The security of the deer wintering areas is absolutely essential as noted above, and the transmission line should be re-routed to avoid the three areas. If the right of way must traverse the deer wintering areas, then I have two recommendations:

1) That the right of way through the deer wintering area be treated in the same fashion as the buffer zone along watercourses. That is to say the right of way be restricted to three metres in width, and only hand clearing of danger trees be permitted. I'm

likening that deer wintering areas is a sensitive area, the same as the buffer zone along the watercourses.

CHARLES HICKMAN

We can certainly investigate the feasibility of that. Right off the top, I'm not certain if it is always feasible for that depending on terrain conditions. For instance, if there's basically a hill in the middle, we may have trouble or have to take greater height of trees down. So, it'll depend a little bit on the terrain, and we'll have to review that situation.

RICHARD DEBOW

The second recommendation would be that N.B. Power take mitigation measures for the loss of the deer wintering area by purchasing additional lands adjacent to the deer wintering areas, as additional winter habitat or as a buffer zone for the deer wintering area, and actively establish deciduous and coniferous stands of trees for the purpose of establishing a deer wintering area.

CHARLES HICKMAN

I'd have to say that, in general, we don't look upon N.B. Power as being the institution responsible for developing deer habitat. I'd have to leave that to Natural Resources instead. We look upon it as being their responsibility. And so, in general, N.B. Power wouldn't expect to be involved in that type of activity as itself. However, if Natural Resources were to develop such a program, we would certainly be willing to participate.

RICHARD DEBOW

Well, my position on that point would be you, as a proponent, are required to mitigate the loss of deer habitat and that's one way of doing it.

CHARLES HICKMAN

Point taken.

RICHARD DEBOW

It is to be noted that there is a reference to a recommendation that a Christmas tree farm could be carried out on the transmission line right of way. I've seen this recommendation on other occasions. If this is a real recommendation, then I do not see any necessity for clear cutting a right of way. The danger trees could be cut out from time to time and the right of way left in a condition that is beneficial to wildlife.

CHARLES HICKMAN

Christmas tree farming is certainly an acceptable practice within a right of way. The critical point is the maintenance of the right of way. If somebody has his Christmas tree farm they are (indistinct) to maintain the right of way in a fashion that is still allowing the safe use of the transmission line. Other areas require maintenance, and if the land owner is not going to do it, then we have to do the maintenance in some form or other to guarantee the safe use of electricity. So that involves a certain amount of cutting and vegetation maintenance. The use of a Christmas tree farm basically, if you like, supersedes our requirement for vegetation maintenance. They do it (indistinct) their activities.

RICHARD DEBOW

But my point there, as you can appreciate, is that Christmas trees grow at a certain height and trees and brush that are necessary for wildlife habitat would grow to the same height. And that should be permitted is my point.

CHARLES HICKMAN

Within reason we do allow a certain amount of growth within the right of way. It's a question, I guess, of effective vegetation management. We only cut right of ways every five to seven years, and within that time, exactly as you indicate, you can get brush that can come up to eight or ten feet high. And so we do allow vegetation growth up to the height at which it becomes dangerous for the transmission line. A whole vegetation management is developed upon stopping the vegetation at the stage that it becomes dangerous to the line. And that usually is, essentially, the height of an alder, is what it comes down to.

RICHARD DEBOW

The height of what?

CHARLES HICKMAN

The height of an alder tree. Approximately 20 feet. So we do allow vegetation to grow to that height before it is cut on that five- to seven-year cycle. I'd just like to add another line there. I think it's all shown in the literature that allowing that regrowth for that five to seven years, that should provide a considerable amount of what is described as "edge habitat" which is very useful for a number of species and also provides a lot of browse in that five to seven years for such species as deer.

RICHARD DEBOW

Well, that's what I'd like to see. I don't like to see it clear cut back to bare ground again. The Mondego deer wintering area is not shown on Map 1. That map is a small-scale map and should have the deer wintering area plotted out on it, in order to be able to visualize the line going through the yard. That would have been helpful in reviewing your documents. If you'd shown that on your small-scale maps.

CHARLES HICKMAN

We'll look at it the next time we have to do one. I apologize for not having that. I think, actually... Jeff, do we have the detailed maps available? We have the detailed maps available at a much better scale if you wish to have a look.

RICHARD DEBOW

Watercourses and wetlands

I note that the right of way is proposed to cross some 35 watercourses. Each and every one of these watercourses together with the other smaller watercourses that have been omitted are important for our wildlife resources. Every care must be taken to ensure that no sedimentation or siltation flows into these watercourses, and that the necessary shading is provided by buffer zones. The report states that these watercourses are rich in brook

trout habitat. These resources must be protected at all costs. It is to be noted that Paragraph 4.17 of the draft Environmental Protection Plan provides for alternative crossings of streams where there are unforeseen necessities. Certainly the Department of the Environment should point out that any watercourse alteration permit granted by them would not extend to alternative locations, and that a specific permit would be required in these instances. The Environmental Protection Plan provides that wetlands and environmentally sensitive areas are to be avoided, if at all possible. In my view, the wetlands should be avoided as sensitive areas that require protection.

Herbicides

As you well know, the general public does not accept the use of herbicides in forest areas. The study report at 2-11 states that N.B. Power has approximately 6,400 kilometres of transmission lines covering approximately 20,235 hectares, of which 2,400 and 2,800 to 2,833 hectares require annual maintenance by way of vegetation control at an estimated cost of one million and fifty thousand dollars. It is to be noted that 50 percent of this vegetation control is by way of mechanical hydro axes at a cost of $370.00 per hectare, while the remaining 50 percent is done 50/50 by hand clearing and by foliar sprays. The cost of hand clearing by chain saw is between $395.00 and $425.00 per hectare, while the vegetation sprays cost between $321.00 to $346.00 per hectare. Basically, the 607 hectares cleared by way of foliar sprays is saving $60,000.00 dollars. In my view, this modest saving does not justify the use of herbicides.

Dr. Hal Hines, the botanist hired by N.B. Power has recommended manual cutting under the power lines. There is a predicted increased consumption of browse by deer in the right of way and, at the same time, residual effects on foliage. Further studies should be made on this. The effects of herbicides on water biota should also be clarified. While there are various controls for the use of herbicides in effect, it is my view that herbicides should not be used for vegetation control. The control should be by hand or mechanical means.

Access points

As noted above, the length of the transmission line is 241 kilometres. It is proposed that there be access points to the right of way on an average of every eight kilometres. This means that there will be some 30 access points to the line, in addition to the line itself. I've seen nothing in the E.I.A. study nor the report that indicates the locations, lengths or areas of these access strips. I do not think any approval should be granted by the Department of the Environment until these access points are identified and their effects on the environment have been determined. Certainly it is reasonable to ask how many of these access strips will be over existing wood roads or trails, and how many will be newly constructed. Further, it is essential to determine whether or not any of these access strips would go through any deer wintering areas.

While the executive summary prepared by WMS Associates Limited states on Page V that the right of way required is 50 metres in width, I note the summary prepared by the Department of Environment states on Page 3 that the right of way is 90 metres wide. This is almost double and certainly not acceptable for forest habitat purposes. It just takes too much habitat out of use. Can you explain the discrepancy?

CHARLES HICKMAN

Yes. The right of way for this transmission line is 50 metres. We need a 50-metre right of way for this line. Where a land owner is willing, we have asked for an easement of an extra 40 metres, hence the total of 90 metres. The extra 40 metres is for future planning considerations, in case we require another line as load of growth increases in the province. Thus the answer to the discrepancy--for this line it is only a 50-metre right of way. We have requested, where land owners are willing, we have asked for an extra 40 metres.

RICHARD DEBOW

Has the land owner--Department of Natural Resources approved a 90-metre width right of way?

CHARLES HICKMAN

I'm not familiar with the individual communications between our lands people, our real estate people, and Natural Resources. I don't know what the status of that is.

RICHARD DEBOW

E.I.A. report is a literature review. Generally, from the whole E.I.A. report what clearly stands out as a highlight, is a lack of existing information. The phrase "lack of information" is repeated throughout the E.I.A. report. This is absolutely unacceptable. If quantitative data is necessary, then it is the proponent's duty to carry out the necessary studies to establish the data. A literature search and discussions with Department of Natural Resources and Energy and other is not enough. For years, New Brunswick Wildlife Federation and others involved with wildlife and conservation have deplored the lack of statistical data with respect to most of the wildlife of our province. We have constantly urged the Department to upgrade their data. It may be that the lack of data isn't the fault of the Department of Natural Resources and Energy; however, the proponent should not be permitted to fall back on that fact. That is a glaring deficiency in this report.

Electromagnetic fields

I know nothing about electromagnetic fields, but there is a concern in the public about the potential human health risk. The report indicates that there are studies that support the idea that electromagnetic fields do pose a human health risk. I cannot believe that a crown corporation would pursue any project that does not rule out potential health risks. I understand that the implications of magnetic fields on human health are not known. It would appear from the studies that the 354 KV line study in Texas would be more comparable to this 345 KV line, than the 240 KV study in the West.

I also note that the report recommends that there be no long-term exposure to electromagnetic fields. Certainly the deer in the deer yards being traversed by the right of way cannot take note of such a recommendation. If the line is to go through deer yards

with the consequent long-term exposure, then there must be intensive studying done of the deer so exposed to the electromagnetic fields.

Mitigation and Monitoring

I note that the report says that N.B. Power is committed to a comprehensive mitigation program to reduce predicted impacts. I've seen no such proposals, and would like to know what the extensive mitigation program entails. With respect to the monitoring proposals, certainly compliance monitoring is mandatory, as it simply determines whether or not statutory rules and regulations are being adhered to. The effects monitoring is different. That should be built into your program, and should be more than monitoring of electromagnetic fields and osprey populations. Certainly deer wintering areas are important and should be monitored. Further, there is no real baseline data against which future impacts can be measured. As a province, we must cure this deficiency.

BRIAN NEWBOLD

I thank you. Would you like to respond to some of these points, Mr. Hickman?

CHARLES HICKMAN

I've been making notes here and I'll try to respond to some of these that you've raised, and some of the questions you've raised. If I miss any, please remind me.

You talked about the use of herbicides and why we have to use them, and the fact that Dr. Hines has suggested that hand clearing might be more beneficial. I'll leave the discussion of the licensing for the herbicides and the fact that N.B. Power is allowed under the law to use them, to a representative of the Department of the Environment. From our point of view, and to suggest for the lack of the information, Dr. Hines did a survey for us on an existing transmission line in the southern part of the province, and was actually quite satisfied to find that we had some very endangered species on that transmission line, where we do carry out our normal vegetation maintenance. So, the fact that we use sprays did not preclude the existence of very endangered species on the line. Just a point of interest, I

don't think people realize that sprays can actually benefit some species, as well as (indistinct) control other species. I don't know if the representative of the Department of the Environment would like to comment on the use of herbicides within the province?

WENDY SEXSMITH

Is this on? Okay. My name is Wendy Sexsmith and I'm Director of Pesticides Control with the Department of the Environment. And I guess, first of all, what I'd like to do is back up a little bit and just talk about how pesticides are regulated in the province and in Canada, in fact. And then I'll address, or I'll talk a little bit about impacts on wildlife and aquatic biota that Mr. Debow raised.

First of all, you may or may not know that all pesticides that are used in Canada are registered for use in Canada. And the registering body is the federal government. It's the federal Department of Agriculture. In order for a product to become registered in Canada, a very large amount of scientific information is needed. This is demanded from the federal government--the demands are made from the federal government to the company who is interested in registering a product. And not to go into it in a lot of detail, but essentially, it's a very rigorous size base process. And the mandate of that process is to ensure that products that are going to be used in Canada are both safe from a health perspective and from an environmental perspective, and also to ensure that they are efficacious. And that means that they actually do what the label says it will do. The way the process works is essentially, many other departments in the federal government are involved in the review process of the required scientific data, and this would include the federal Department of Environment, the federal Department of Fisheries and Oceans, the federal Department of Health and Welfare, and the federal Department of Forestry if it's a forest product, as well as, of course, the Department of Agriculture.

If the product information that is produced meets all the required protocols, which incidentally usually takes about ten years and about 20 million dollars, then it may, in fact, be registered for use in Canada. Only if it has gone through this registration process, this

rigorous scientific registration process, can a product be used in New Brunswick. It must first go through this process. In this process a lot of the information like environmental impact information, acute toxicity information, long-term toxicity information--all this kind of information is produced and it's called a data package.

So once the product is registered in Canada and, say N.B. Power wants to use a product in New Brunswick, they would apply to us for a permit. Now first of all, the operator who is interested in carrying out this project would have to have an operator's license, and that is something that we do. Secondly, they would have to have certified applicators, and that means that their applicators have to show us through an examination or through experience or courses that they are adequately educated to carry out that type of application, not just any application, but specific. Then they would require a permit. So they would apply to us for a permit and we would make sure that: a) the products are registered, that they're registered for that particular use; and we produce a permit which has permit guidelines, which are essentially conditions under which they would be allowed to operate, given that the product is registered. And then it's going to be used in New Brunswick for the specific purposes. And in the permit guideline we would have things like buffer zones also, wind speeds for use, setbacks from habitation, watercourses and any other sensitive areas, safe ways to operate for instance, mixers and loaders have to have a certain amount of equipment on and that sort of thing. So that, in a nutshell, gives you some idea of how pesticides are regulated in Canada and in New Brunswick in a very brief nutshell.

I guess, just to back up to Mr. Debow's concerns with respect to essentially environmental impact relating to wildlife and fish--now I can go back a little further here, if you'll bear with me. Years ago everybody remembers DDT. A DDT was a registered product, it was registered during the World War II and it was used many years after up until the late 60's. Now the reason I'm raising this is because the difference between the products that were registered those many years ago, particularly like DDT, and those products that are registered today, they're very different. DDT essentially, and the products like them, were what are called fat soluble, persistent products. And when a product is fat

soluble it tends to accumulate in the environment and essentially will simply build up in the food chain. The products that are registered today are water soluble and non-persistent. So they're really diametrically opposed to something like DDT. And water soluble means that: a) they don't tend to bio-accumulate--that means if they are eaten by any animals they are excreted and also because they are not persistent, they tend to break down rapidly in the environment and do not have a chance to be there very long or build up in the food chain, because of both of those factors. So the products that would be used today would fall into the second category which is water soluble, non-persistent. There are a lot of other factors, but those are sort of the basic ones to contrast with something like DDT.

Now in general, herbicides which is what N.B. Power, for instance, would be using or would want to use--herbicides are products developed to kill green things simply put. They're developed to retard or impact on the growth of vegetation, be they woody shrubs or herbaceous vegetations. Now in most cases with herbicides the way they work in a plant is through systems that animals and fish and insects don't even have. So the reason I'm saying this is what I'm going to say next is, in general, herbicides have very low toxicity to animals, fish, birds, plants and insects.

So now to go back to the registration system. When a product like a herbicide is going through the registration process, all this kind of information is required. So we know that, for instance, some of the products that might be proposed by N.B. Power have very low toxicity, acute toxicity, to wildlife, birds, fish and that is essentially a piece of information that is well documented.

I guess the other thing is that because we, through our permit guidelines, we have setbacks for watercourses and other operating perimeters. The possibility of much off-target movement of herbicides into aquatic situations is greatly reduced. So, a) you have a product that has essentially a very low toxicity and that is water soluble, and not bio-accumulative. So that if a deer is grazing on a power line and happens to ingest some herbicide that has been applied, a) it wouldn't be acutely toxic, it doesn't reside in the

animal so there is no concern for build-up. And I guess, the other point would be that under the operating guidelines that we have and because we do monitor for compliance and all that sort of thing, I guess our experience has been that there doesn't appear to be very much off-target movement. And because the toxicity is very low, if some did move off into the aquatic environment it would certainly not be acutely toxic. The other aspect is many of these products do degrade fairly quickly in the environment.

So I'll stop there, unless Mr. Debow has some questions he'd like to pick up on.

BRIAN NEWBOLD

Okay, your statement at the end?

CHARLES HICKMAN

Okay, I'll carry on from where I left off. One of the other points that you brought up was the question of access roads, how many there would be, where they would be located. Generally speaking, we use existing roads wherever possible. We're not really in the road building business. Where there are no other roads--forestry roads, access roads, hard-top roads, all-weather strips, all-weather roads--we will, if necessary, build a road in. The reason we cannot say in the E.I.A. document as to where they would be is because it depends on, for instance, negotiations with land owners to get access across private property, and we do not have the easements with land owners for this line yet. In general, we do not believe we will be building very many access roads on this route. When you look at the maps, and again they're available at the back, you realize that the whole area is criss-crossed with the newest forestry roads and existing highways. So, we don't know how many new access roads there will be, but basically, there will be very few. Any watercourses crossings that have to take place on an access road, we will be applying for a watercourse alteration permit in which we will be told essentially what we can and can't do. And that obviously would depend on the individual circumstance for a stream crossing.

I'll keep on going down the list here. Now the question about the lack of data in the Impact Assessment. The Impact Assessment as it was carried out by WMS Associates--actually the assessment takes into account the lack of certainty or the lack of information that is available. Therefore, there is a very high degree of uncertainty in the data, or perhaps there was very little data to base the assessment on, that is in whole built into the assessment. The fine details of that are laid out in the Impact Assessment document, but it is built into the system.

We have used, wherever possible, any available information and the consultant was selected re: to their expertise in this field, knowledge of deer yards, deer habitat, fisheries habitat and so on. They have been in contact with, as you indicated, a biologist regionally. All people who may have information, they have had a series of meetings with, for instance, outfitters. They have gathered information from the outfitters that may be of use in carrying out the Impact Assessment. We recognize that there are frequently poor statistical data upon which to base an Impact Assessment. But wherever possible we have used what is available, and if there is no data available, we've gone to the level, if you like, of professional judgement based on biologists in the field who are familiar with the area, who are familiar with the resources in question. It is very difficult, I realize and as you've realized, to gather an extensive body of baseline data upon which to base an impact, that we have to rely, on occasion, on professional judgment.

The mitigation package that was mentioned--essentially the Environmental Protection Plan represents the mitigation that will be carried out for this line. The protection plan lists many, many examples of mitigations that will be used from siltation control to avoidance. I won't go through all the details, but it basically is the detailed mitigation plan. And as I've indicated, it is still a draft plan available for comment.

Going on to the question of monitoring, as indicated, there are two levels of monitoring: one is compliance monitoring, and I should specify. The compliance monitoring is referred to in the Impact Assessment as monitoring that we, ourselves, would

do. That our environmental co-ordinator, and his job and responsibilities are outlined quite clearly in the protection plan, that he will undertake, if you like, compliance monitoring for ourselves. In addition to that, there will obviously be compliance monitoring by the regulatory agencies, and that will be by both federal and provincial individuals who spend their days in the field and they are familiar with both our activities, the correct way to carry out a job. So that compliance monitoring will also be carried out by the regulators, as well as by ourselves. And the effects monitoring has been based on or are being developed upon those resources that are considered to be of greatest interest or that may be exposed to the greatest impacts. And essentially the consultant's assessment indicated this. The line will have very few impacts periods, and only those that have--I think it's moderate impact or greater--are targeted for effects monitoring. So that's the basis for the effects monitoring which will be carried out for a period of time. For instance, with ospreys we have a regular monitoring program where we fly the lines, take note of where there's an osprey nest, and as soon as it becomes a hazard to the safe operation of the line, we take action to trim the nest or do whatever is required to protect the nest or resource. That's a specific case. Ospreys are recognized as being an important resource. We go a long way to protect that resource.

One other question you brought up is, I guess, the whole issue and the perception about electromagnetic field. We have an individual named Joe McCulley who works in N.B. Power who has been following the EMF and I'll refer to it as an issue for the past two years I guess, on an almost full-time basis. I'll let him give you a brief review of the status of the issue and on studies that have been carried out. And perhaps, you can just summarize what the potential for impacts are on, for instance, deer or, indeed, humans.

JOE MCCULLEY

I'm Joe McCulley. I work for the Health and Safety Division of N.B. Power. And Mr. Debow, if I don't respond to all your questions please stand up and reiterate them, because I'm not sure I caught them all.

First of all, I'd like to deal with a comment that I thought you made that our report recommended against long-term exposure to EMF. I don't know where it says that. Did I understand you correctly? No. It doesn't say that in the report and there are some good reasons for that. It is because the scientists don't know what is biologically important when it comes to EMF, whether it's long-term exposure, short-term exposure, different types of frequencies, that kind of thing. But anyway, that aside, I'll go into a little bit of a spiel that I have here and hope I won't bore you too much.

First of all, after extensive research and careful examination of hundred of studies, the conclusion is that there are no adverse health effects associated with EMF exposure. Now that aside, we do recognize that there is quite a bit of controversy especially in the popular press. But international scientific bodies have examined this research and this are the conclusions that they have arrived at. It is not something that we have arrived at by ourselves. However, there is considerable research going on at the moment in this area to help to clarify this for the general public. Now, there are different sources of EMF, not only transmission lines. What they have found is there is considerably higher levels found within your own home, and I invite you to go to our table at the break or at the end of this presentation and there is some information that shows you, or it compares the different levels of EMF underneath a transmission line compared to what you would find in your normal home. Also, what is important with EMF is that the further away you are, the less that you can measure. So if you're right at the edge of the right of way of a transmission line, you would be able to measure higher levels of EMF, than you would, say, 15 metres away from the edge of the right of way. It is very much distance-dependent, as well.

Now as far as the effects on wildlife, I guess the assumption that we take is that if they cannot demonstrate these effects on humans who are exposed to it routinely, then there would be no effects on wildlife. I guess there is some support in literature for some small species to be aware of high levels of electromagnetic fields, but as far as being aware, even being affected at the levels found within a right of way, there is no support for that. And again, I'd like to say that we do have considerable information on the table from the Health

and Welfare Canada and what not, that we invite you to take home with you to read. Does that answer your concerns, or?... Okay. Thanks.

BRIAN NEWBOLD

I thank you.

CHARLES HICKMAN

I just would like to ask, have I missed any of the points that you had concerns about, which I would invite any further information on?

BRIAN NEWBOLD

Thank you. What we can do is, we've been going for about an hour and in a few minutes I'm going to declare in our coffee break, because coffee I understand, is going to be served in the next room. But at this time, are there any, you know, questions to be raised by people present about, for instance, matters raised by Mr. Debow's statement, or for that matter, anything for instance, in the Salisbury area? After all, there must be local concerns. Yes, please...

LAWRENCE WORTMAN

This is another question regarding the transmission lines...

BRIAN NEWBOLD

Just a second, could you please identify yourself?

LAWRENCE WORTMAN

Lawrence Wortman. I'm property owner in the Salisbury area. Regarding transmission lines that need to be clear cut, I find that this opens up the areas to all-terrain vehicles and snowmobiles that often result in damage to farm property or private property, because the area is opened up and then gives them access to cleared fields and crop fields.

Also another question regarding the transmission line. The time table for this area, do you have any idea when work will begin to clear cut the wood land and to erect towers on farm land in this area?

CHARLES HICKMAN

Perhaps I can answer the second question first. It's probably a shorter answer. When we have approval for this project, assuming we get approval from the Department of the Environment and the provincial government, we expect that we would start work in the Salisbury area--I'm guessing a little bit, depending on how soon we get our contracts prepared--around the first of June. We would be starting clearing from Salisbury terminal working out from the terminal along the line, and at the same time, working south from Newcastle down the line. The clearing is a function essentially of the contractors as to how fast it has to be done, and Mr. Kingston or Mr. Clark may be able to provide a little more specific details.

DARRELL CLARK

It generally, within a couple of weeks after we start clearing we move in with our construction crews right behind. And as they clear the line, we start erecting the line, the steel towers and so on, behind the clearing contractor.

LAWRENCE WORTMAN

So you're saying this should start in June in this area?

CHARLES HICKMAN

Yes.

DARRELL CLARK

Pending approval.

LAWRENCE WORTMAN

What about farm land that's, you know, being cropped or pasture land? Are they going to work around a farmer's timetable if possible? I mean, you're going to open up the area to take your equipment in to set up a tower, maybe in a hayfield or in a pasture. What can we expect on this?

DARRELL CLARK

What you can expect in that is that if you have a field which has a crop or a hayfield, we will work with you, we will avoid those areas until your crop is in from the field to minimize the, you know, the damage to your land. If after the line is built during maintenance and so on, it is necessary to go into an area due to an outage of the line or something, we do compensate for any damage that is done. That's after a line is built. During construction it is our policy to stay off of the farm land until we can get a mutually agreeable time with the land owner.

LAWRENCE WORTMAN

I just noticed in your report, too, in regards to fences, those are repaired or everything is supposed to be put back the way it was?

DARRELL CLARK

Yes, it is. Maybe John Kingston... Do you want to address this, John? I see him waving his hand there.

JOHN KINGSTON

Yes. My name is John Kingston. I'm employed by N.B. Power. What we do when we start construction of a transmission line, I'll send a representative out who works with me and he will talk to all land owners. And in regards to fences, when we did the survey of the centre line, we now have it down of what type of fence you have across your property. And we will approach the land owner and we generally put a new fence up with a gate in it, so that if we do have to go in on the line again that we'd be going through the gate... But

if you do have any concern about crops, then we would like to get that information prior, before we go in. Okay?

CHARLES HICKMAN

Just getting back to the first question, the question of alternate uses, I guess, of the transmission line. We recognize that transmission lines are used and especially during the winter by recreational people with snowmobiles, and during the summer with ATC's and ATV's. Wherever possible... Sorry, I'll start again. We do replace any fences and maintain any fences along the transmission line that already exist, and if a land owner wishes, we will install fences along the right of way of property boundaries to try and minimize the alternate use of the right of way by recreational users. However, we recognize that particularly in winter with snowmobiles, it is very difficult to prevent somebody of using a transmission line. Ultimately, the land is still owned by the land owner, and we will work with the land owner to the very best of our ability to prevent, if that is his desire, alternate use of that property. However, we don't actually own land and therefore we cannot ourselves actually control access to the right of way. But as I say, if a land owner has a concern, we will try and accommodate that concern by installing fences with gates, if necessary of if desired, along the right of way. We do recognize it is a concern and it is not an easy one to address. I recognize that.

BRIAN NEWBOLD

Thank you, Mr. Hickman. Any other comments? If not, as I said, I'll declare a coffee break for about 20 minutes. I would ask you to maybe just think about the matters that have been raised and anything else that you would like to bring up. And then, as I say, you can use the coffee break for some thinking and exchanges. And then when we come back I'll, you know, throw the meeting open to the floor and repeat the request to see whether anything, you know, you'd like to raise. Because this is a good occasion to do so.

Alors maintenant, je vais déclarer une pause-café pour un moment de réflexion et d'échange et je vous remercie. Thank you.

BREAK/PAUSE

BRIAN NEWBOLD

Okay? So, ladies and gentlemen, we will re-convene. I know you've had some time to think about matters. Are there any particular things you'd like to raise? Don't be shy, don't be afraid of the microphones. Anything at all in collection with either... Yes, please.

CHARLES HICKMAN

Don't watch. I haven't finished my donut yet.

BRUCE LEWIS

I'm Bruce Lewis. I reside in the Salisbury area. I'm concerned about the herbicide spraying for controlling the vegetation within the transmission line. I think it should be--the trees and bushes that need to be cut should be done either by hand cutting or with a machine. I can't see a reason for using herbicides. You do save some money, but it is a risk. Years ago, DDT was supposed to be safe, but in 10 or 20 years maybe the herbicide won't be so safe, either.

CHARLES HICKMAN

Just to start, I asked Mr. Clark to review the actual process and the frequency with which we might use a herbicide, just to explain the management program that we follow. And I think Wendy might be willing to answer some of the questions about the risk aspect. Mr. Clark will just explain how often and where we might use a herbicide situation.

DARRELL CLARK

Speaking just in general terms, the advantage to a herbicide is that it does kill the plant completely so that you don't get sprouts coming out of the root system, as I understand it. Now, I'm not a botanist and I'm not a specialist in these things, but if I make mistakes someone who is more knowledgeable can correct me. We like to do a herbicide application within one to two years after building the line and that gives us good

control over those species that are fast growing and could cause us problems. It sets them back to the point they will come back in, but they tend to grow at a slower rate if they've been treated with herbicides. This will reduce the frequency with which we have to go in to maintain the line, and yes, it is an economic decision. And you know, we, as a utility are committed and we have a legal obligation to provide the power to the customers within the province at the lowest cost that we can. We view the use of herbicides as an acceptable alternative. These are licensed for use within the province, so we take advantage of the fact that we can use them, and we find that they are very effective. Once that initial application has been put on, the next cycle of clearing may very well be mechanical or hand clearing. We do not use herbicides necessarily on every cycle. In fact, it's very possible that after an application of herbicide the next cycle could be five to seven years, would be mechanical cutting or hand. The next cycle after that could be--and it's only after the root structures and so on have developed to a state where they become a concern, that we would again treat with herbicides. So, it's not a case that we're spraying a section, you know, on a regular basis.

Now having said that, there are some exceptions to the rule. There are areas that only receive mechanical clearing and there are some areas where we find herbicides to be effective as a routine tool. Having concern about the herbicides, there are clear restrictions on where we can use them--streams, agricultural land, and so on, are all avoided with these materials. In general, that covers what I know about them, at least, and if I've made any errors someone from N.B. Power can correct them.

WENDY SEXSMITH

Wendy Sexsmith, Pesticides, with the Department of the Environment. I guess what I can say, first of all, is that the pesticides group in the Department of Environment has the mandate to regulation pesticide application in the province. Now first and foremost, our mandate is to make sure that if pesticides are going to be used--and when I say pesticides I mean, I include herbicides--if pesticides are going to be used, they are going to be used in the safest way possible. And I don't really want to repeat myself too much, but I have

to reiterate a little bit about the registration process and the fact that it is a science-based registration process that, essentially, at the other end of the process upon registration, the product, to the best of our knowledge today--and you know that's a fair comment--it is safe to use from an environmental and health perspective following the label and our conditions, and it's efficacious.

I guess the comment on DDT and today's products, I just have to go back to saying that what I said before is that really the two kinds of products are very different. So we are dealing with quite a different situation. We are dealing with a much improved data package. We really know a lot about these products. And really, I can't, I don't think that I can say much more than I already said earlier, unless you have something specific.

BRIAN NEWBOLD

Thank you. Anything else you'd like to raise? It's the time to do so. I won't ask three times that it turns out to be an auction. Je vous demanderais, par example, en français s'il y en a peut-être qui aimeraient poser des questions dans la langue de Molière. C'est le moment approprié, je crois, pour soulever des problèmes ou des commentaires, si c'est votre désir.

So if there are no other questions, it remains for me to thank you for having attended. And we realize that this is very useful input, and anyone associated with the project sure benefits from this kind of exercise, and the main thing being that people--that is my own opinion--people in a local area are usually most, how do we say, well placed to be aware of local problems, and that's why I think it's important that hearings of this type be held.

Je voudrais terminer en vous remerciant d'être venus et en soulignant l'importance des audiences publiques pour les projets d'envergure. Merci beaucoup. Bonsoir.

Thank you very much. Good evening.